WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
OREGON

UNITED STATES DEPARTMENT of AGRICULTURE···SOIL CONSERVATION SERVICE

and

OREGON STATE UNIVERSITY

and

STATE ENGINEER of OREGON

Data included in this report were obtained by the agencies named above in cooperation with other Federal, State and private organizations.

AS OF

APR. 1, 1966

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season as they affect runoff will add to be an effective average. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data or reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Listed below are water supply outlook reports based on Federal-State-Private Cooperative snow surveys. Those published by the Soil Conservation Service may be obtained from Soil Conservation Service, Room 507, Federal Building, 701 N. W. Glisan, Portland, Oregon 97209.

PUBLISHED BY SOIL CONSERVATION SERVICE

REPORTS	ISSUED	LOCATION	COOPERATING WITH
RIVER BASINS			
Western United States	Monthly (Feb.-May)	Portland, Oregon	All Cooperators
Basic Data Summary	October 1	Portland, Oregon	All Cooperators
STATES			
Alaska	Monthly (Mar.-May)	Palmer, Alaska	Alaska S.C.D.
Arizona	Semi-Monthly (Jan.15 - Apr.1)	Phoenix, Arizona	Salt R. Valley Water Users Assoc. Ariz. Agr. Exp. Station
Colorado and New Mexico	Monthly (Feb.-May)	Fort Collins, Colorado	Colo. State University Colo. State Engineer N. Mex. State Engineer
Idaho	Monthly (Jan.-June)	Boise, Idaho	Idaho State Reclamation Engineer
Montana	Monthly (Jan.-June)	Bozeman, Montana	Mont. Agr. Exp. Station
Nevada	Monthly (Jan.-May)	Reno, Nevada	Nevada Dept. of Conservation and Natural Resources - Division of Water Resources
Oregon	Monthly (Jan.-June)	Portland, Oregon	Oreg. State University Oregon State Engineer
Utah	Monthly (Jan.-June)	Salt Lake City, Utah	Utah State Engineer
Washington	Monthly (Feb.-June)	Spokane, Washington	Wn. State Dept. of Conservation
Wyoming	Monthly (Feb.-June)	Casper, Wyoming	Wyoming State Engineer

PUBLISHED BY OTHER AGENCIES

REPORTS	ISSUED	AGENCY
British Columbia	Monthly (Feb.-June)	Water Resources Service, Dept. of Lands, Forest and Water Resources, Parliament Bldg., Victoria, B.C., Canada
California	Monthly (Feb.-May)	Calif. Dept. of Water Resources, P.O. Box 388, Sacramento, Calif.

USDA-SCS-PORTLAND, OREG. 1965

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
OREGON

ISSUED

APRIL 8, 1966

Report prepared by

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and

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Issued by

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EXPERIMENT STATION

CHRIS L. WHEELER
STATE ENGINEER
STATE OF OREGON

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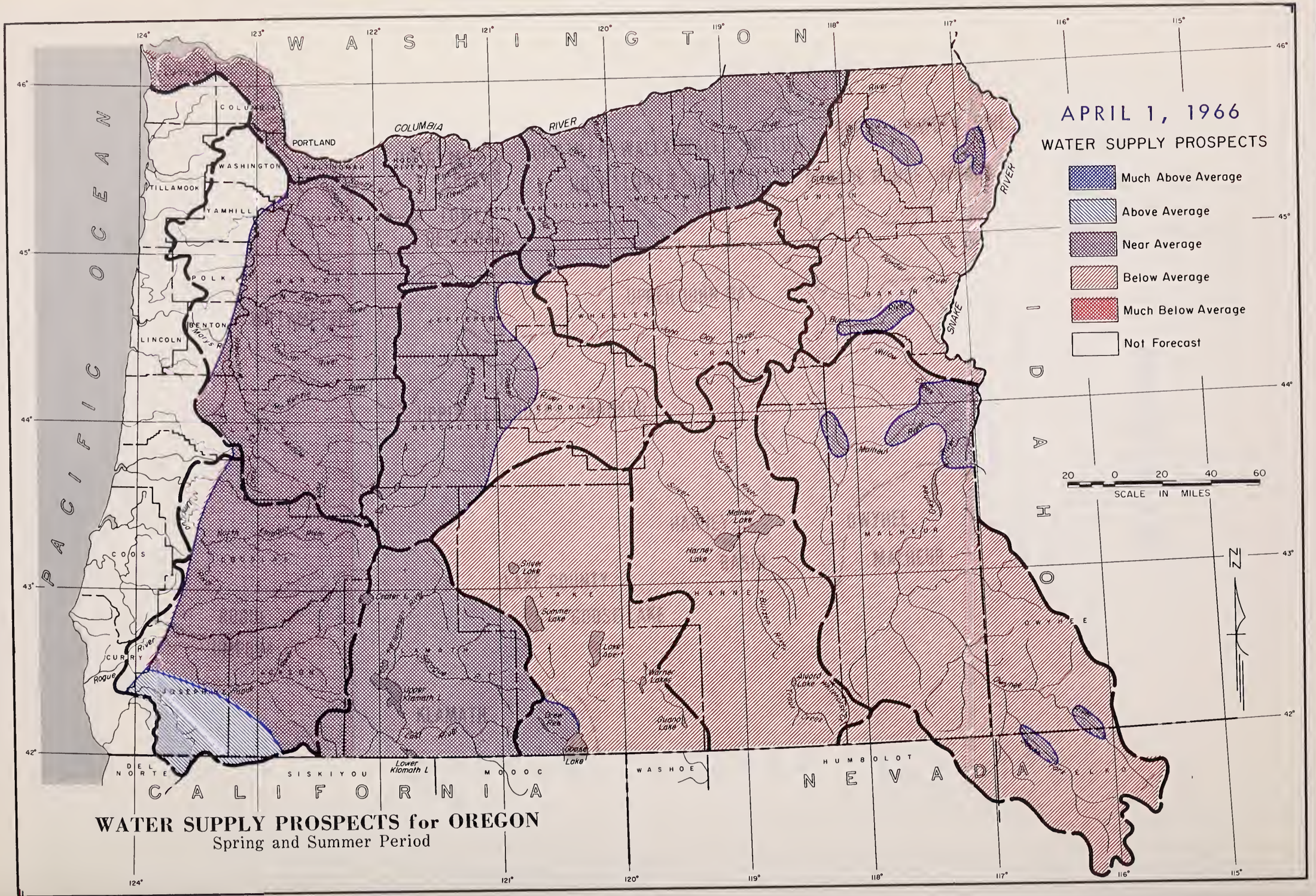


WATER SUPPLY PROSPECTS for OREGON

Spring and Summer Period

WATER SUPPLY OUTLOOK for OREGON

APRIL 1, 1966

The outlook for spring and summer water supplies in Oregon now ranges from "very good" in the western half of the state to "poor" in scattered eastern Oregon areas in Umatilla, Union, Baker, Malheur, Grant, Wheeler, Crook, Harney and Lake Counties. Carryover water supplies will "save the day" for many eastern Oregon irrigators.

SNOW COVER

Water content of the mountain snowpack increased during March at near normal rates only in the Willamette and Wallowa watersheds. Elsewhere, the snowpacks increased only slightly or actually were decreased by snowmelt.

Mountain snowpacks are, therefore, about average or slightly above average west of the Cascades, in the Klamath Basin and in the Hood River-Wasco area. Snowpacks are below average east and south of these areas and are down to 65 and 54 percent average in Harney and Malheur areas.

SOIL MOISTURE

Moisture in the soil mantle under the snowpack is near average but is much poorer than last year, especially in Baker, Grant, Harney and Lake Counties.

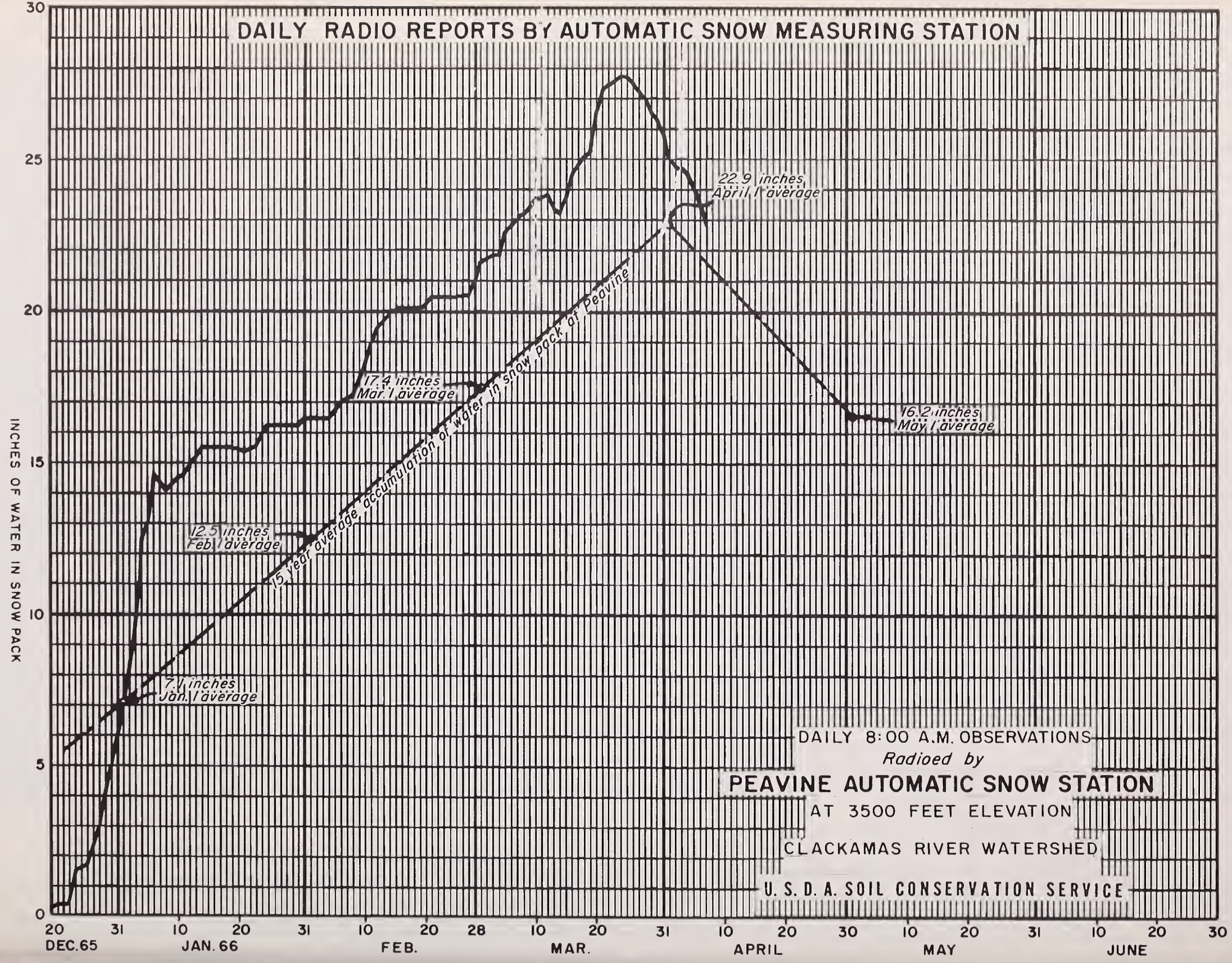
RESERVOIR STORAGE

Water stored in 26 Oregon reservoirs used primarily for irrigation totals 114 percent of the 15-year average (1948-62) and 94 percent of last year on April first. These reservoirs are now holding 78 percent of their total capacity, whereas, last year after the floods they held 82 percent of their capacity.

Stored water supplies in McKay Reservoir near Pendleton and Antelope Reservoir in Jordan Valley are behind schedule, and water users served from these sources will probably experience some shortages.

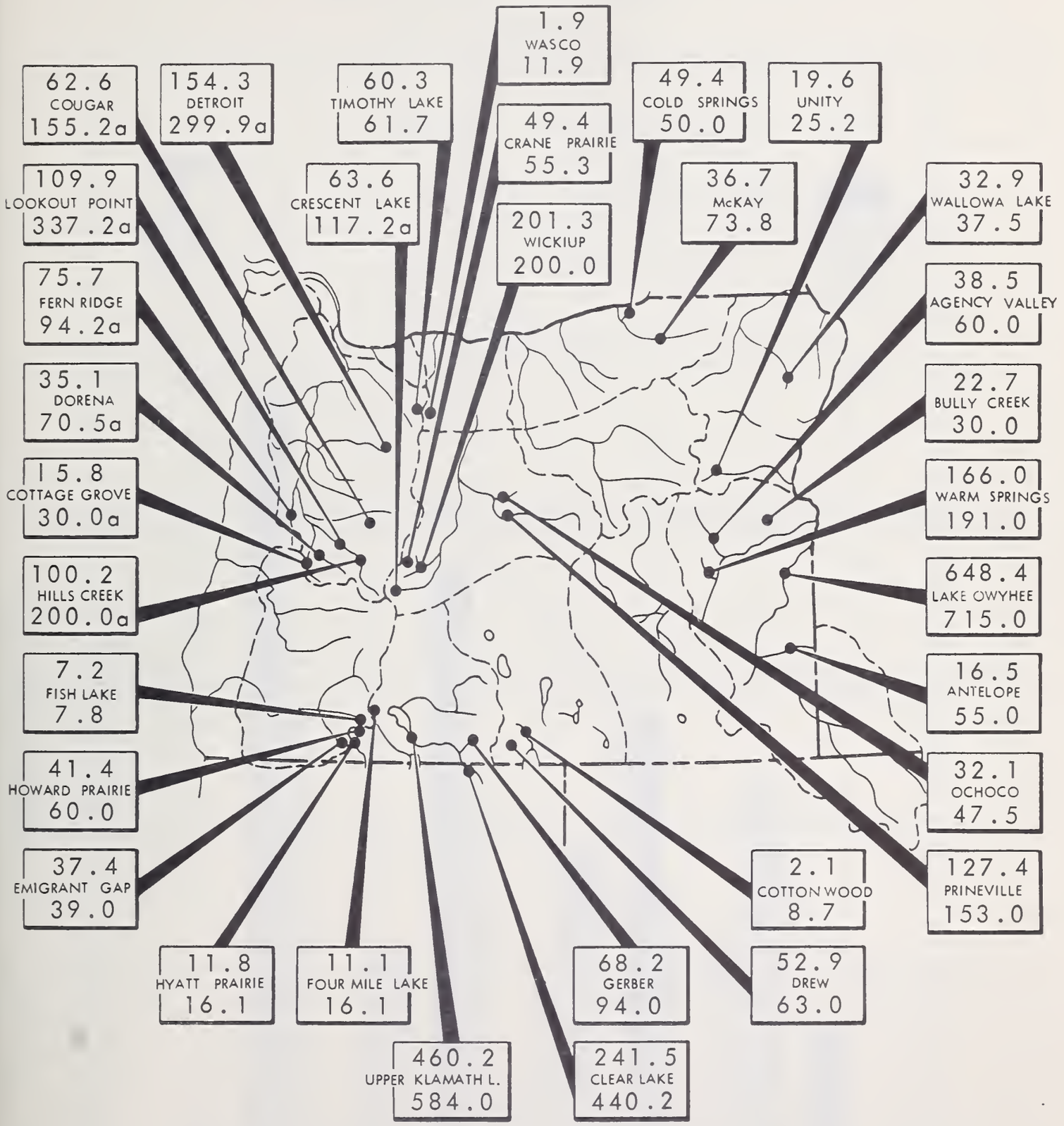
STREAMFLOW

Forecasts of spring and summer streamflow (April through September) range downward from 139 percent average on the Illinois to near average on the west slope of the Cascades to 80 to 90 percent average in the Klamath, Deschutes, Umatilla and Walla Walla basins, on down to 60 and 70 percent average in Goose Lake, Chewaucan, Crooked, John Day, Powder and Grande Ronde Basins and between 60 percent and 40 percent in the remaining areas of Harney and Malheur Counties plus Burnt River.


DAILY RADIO REPORTS BY AUTOMATIC SNOW MEASURING STATION
INCHES OF WATER IN SNOW PACK
0
5
10
15
20
25
30
22.9 inches
April 1 average
17.4 inches
Mar. 1 average
16.2 inches
May 1 average
12.5 inches
Feb. 1 average
7.1 inches
Jan. 1 average
15 Year average accumulation of water in snow pack at Peavine
20 DEC.65
31
10
20
JAN. 66
31
10
20
FEB.
28
10
20
MAR.
31
10
20
APRIL
30
10
20
MAY
31
10
20
JUNE
30
DAILY 8:00 A.M. OBSERVATIONS
Radioed by
PEAVINE AUTOMATIC SNOW STATION
AT 3500 FEET ELEVATION
CLACKAMAS RIVER WATERSHED
U. S. D. A. SOIL CONSERVATION SERVICE

STORAGE STATUS of OREGON RESERVOIRS
usable contents in thousands of acre feet

APRIL 1, 1966



EXPLANATION

687.0
LAKE OWYHEE
715.0

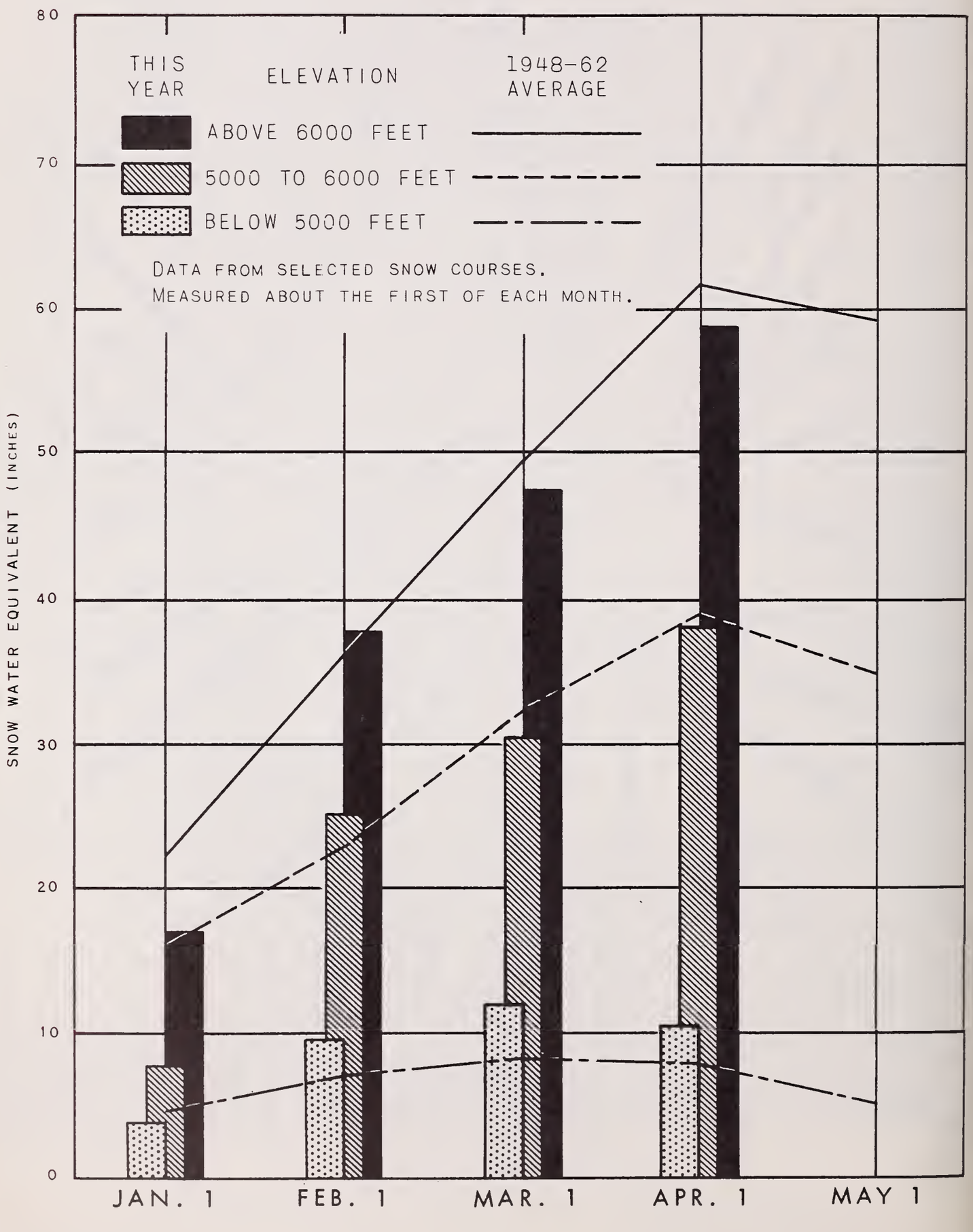
---Contents

---Capacity

(a) Multiple purpose reservoir - space reserved for flood runoff.
N. R. - No report.

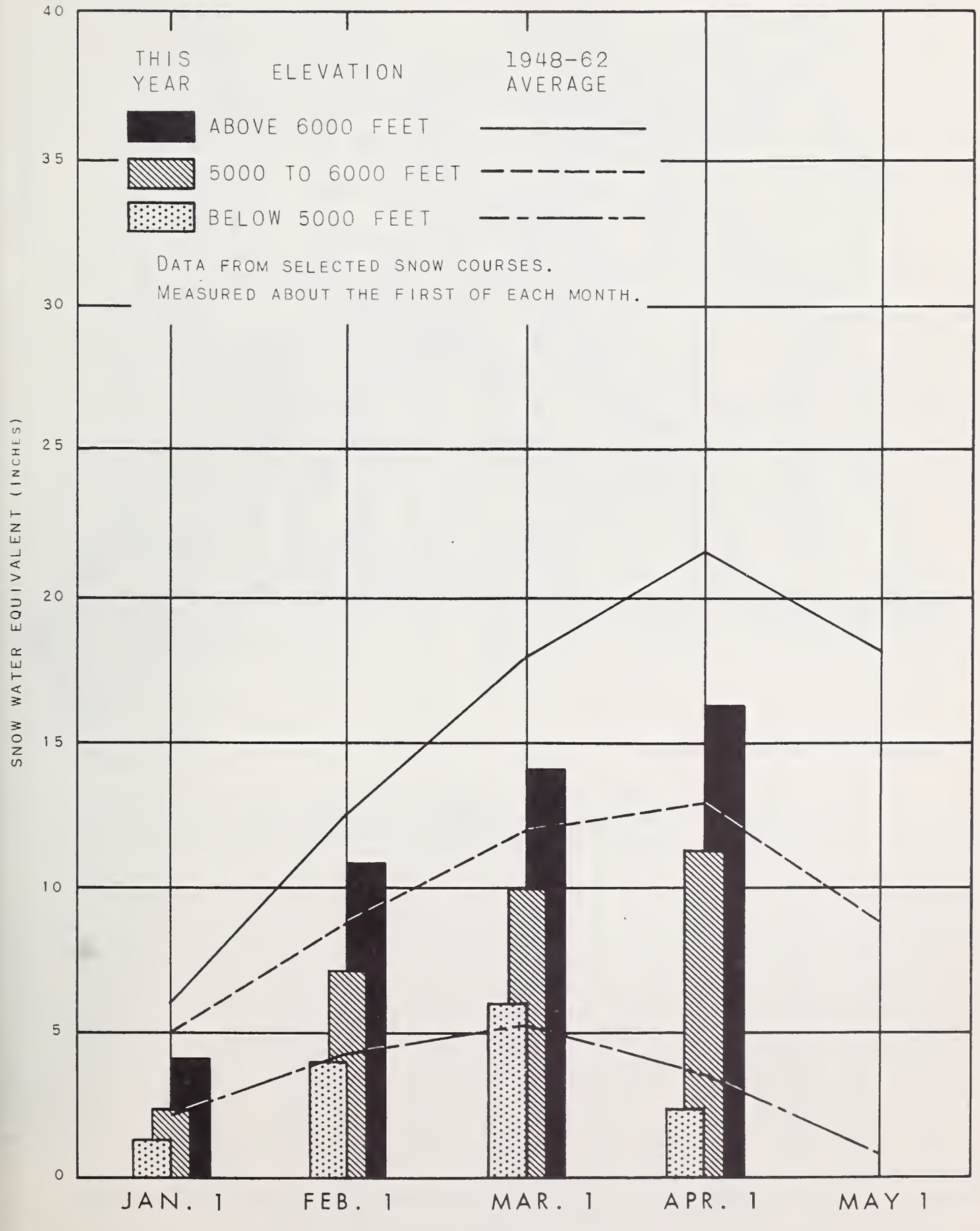
SNOW WATER ACCUMULATION IN OREGON CASCADES

APRIL 1, 1966

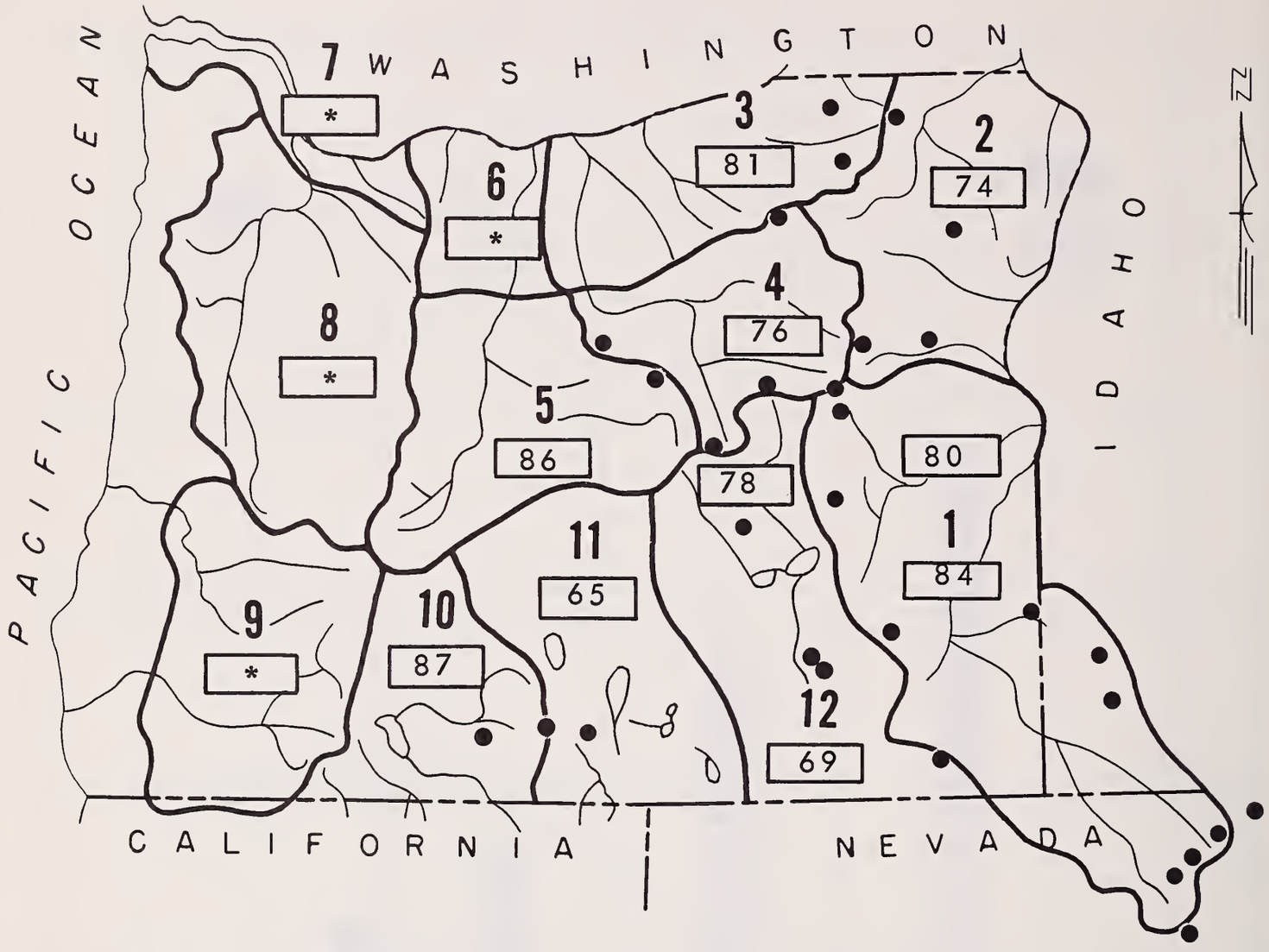


SNOW WATER ACCUMULATION IN EASTERN OREGON

APRIL 1, 1966



MOUNTAIN SOIL MOISTURE in OREGON
as percent of capacity
APRIL 1, 1966

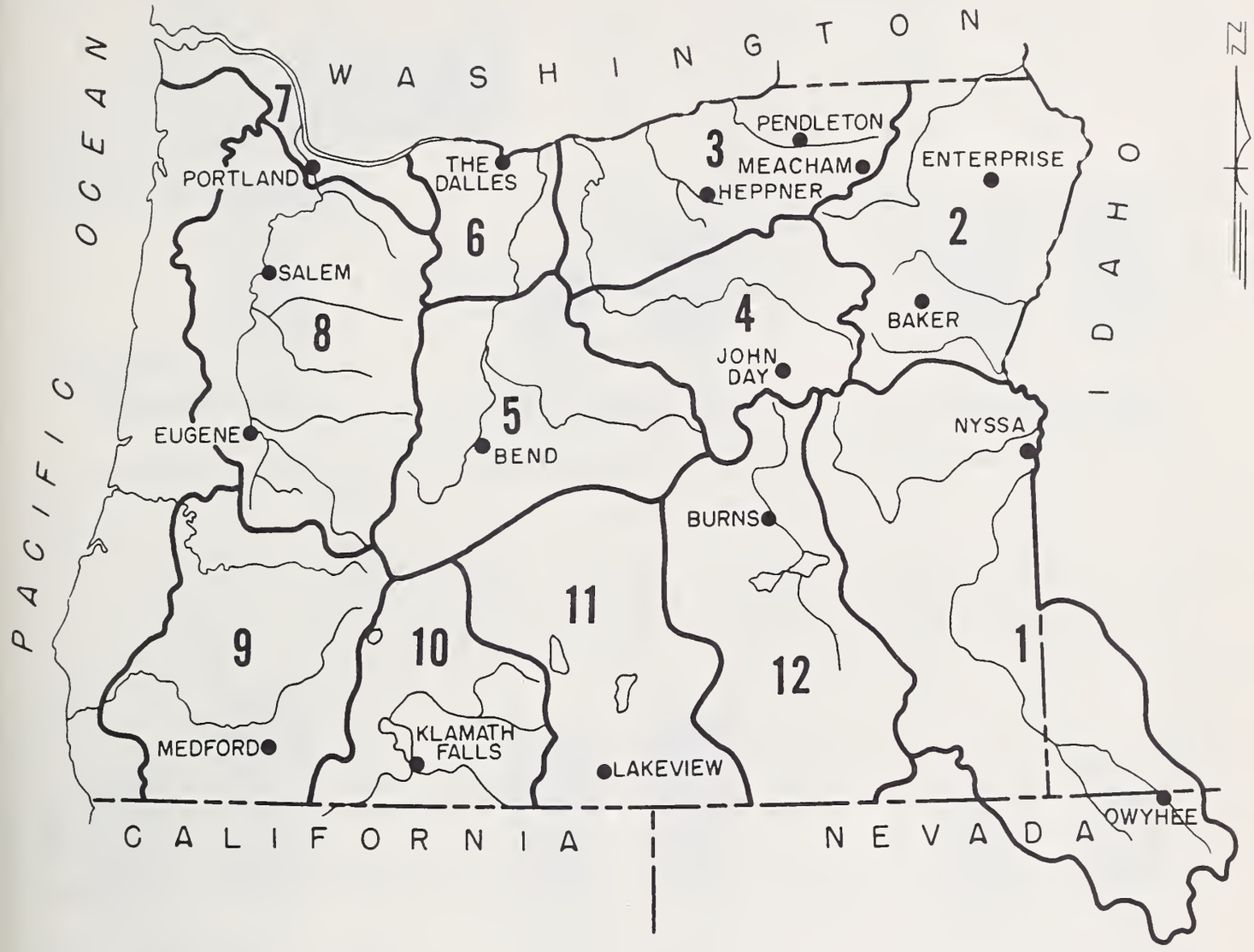


● Soil Moisture Station

**Moisture studies not yet developed in these areas.*

VALLEY PRECIPITATION in OREGON [a]

APRIL 1, 1966

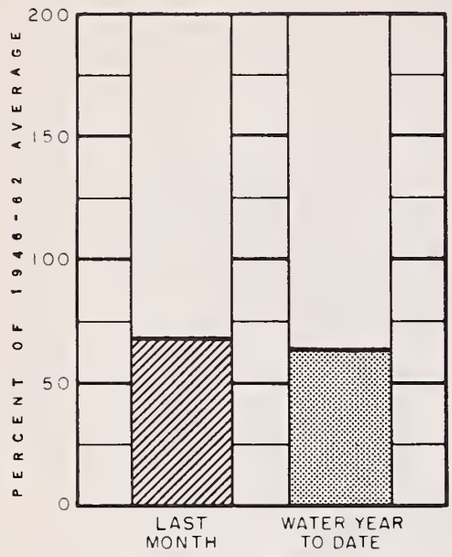


PRECIPITATION as PERCENT of the 1948-62 AVERAGE					
STATION	LAST MONTH	WATER YEAR TO DATE [b]	STATION	LAST MONTH	WATER YEAR TO DATE [b]
Baker Apt.	113	79	Lakeview	62	76
Bend	70	90	Meacham	58	64
Burns	65	66	Medford Apt.	87	85
Enterprise	120	65	Nyssa	80	68
Eugene Apt.	120	102	Pendleton Apt.	78	79
Heppner	69	64	Portland Apt.	115	97
John Day	45	56	Salem Apt.	125	93
Klamath Falls Apt.	60	85	The Dalles	58	68
			Owyhee (Nev.)	60	85

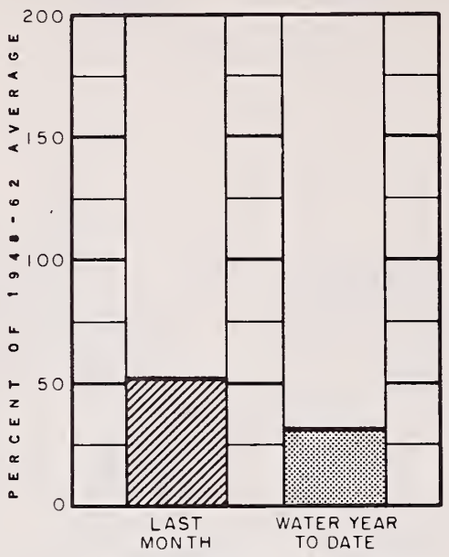
(a) Preliminary data furnished by the U.S. Weather Bureau. (b) Oct. 1 to date. (c) Report delayed.

CURRENT OREGON STREAMFLOW

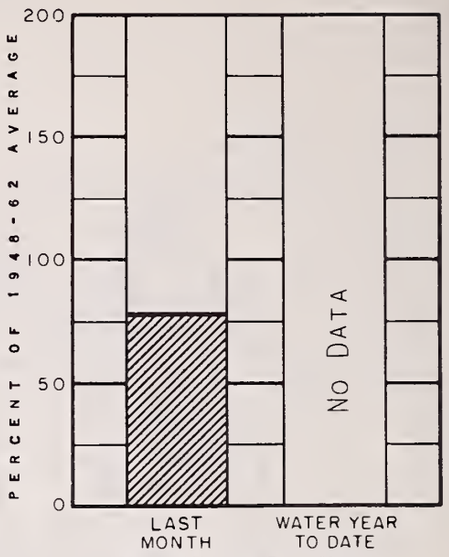
APRIL 1, 1966



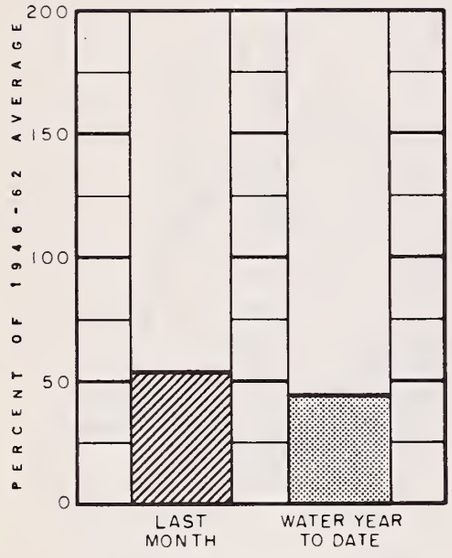
Owyhee Lake net inflow



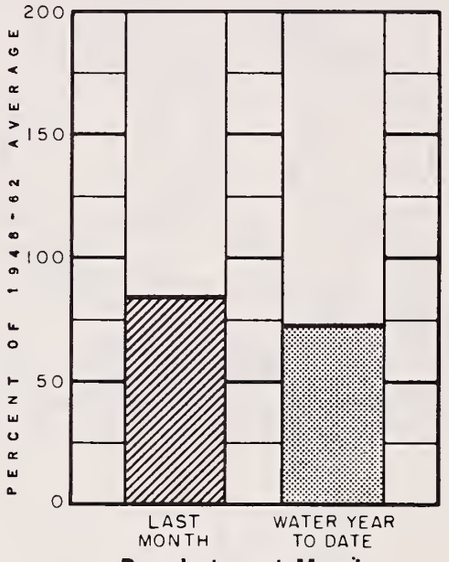
Grande Ronde at La Grande



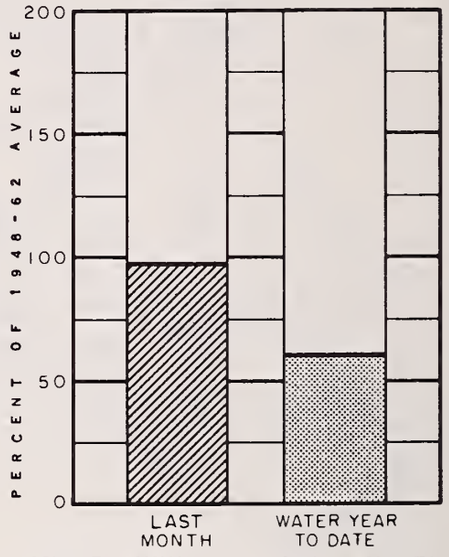
Umatilla at Pendleton



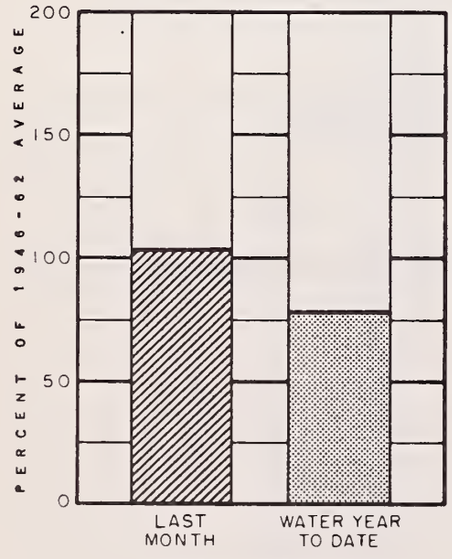
John Day at Service Creek



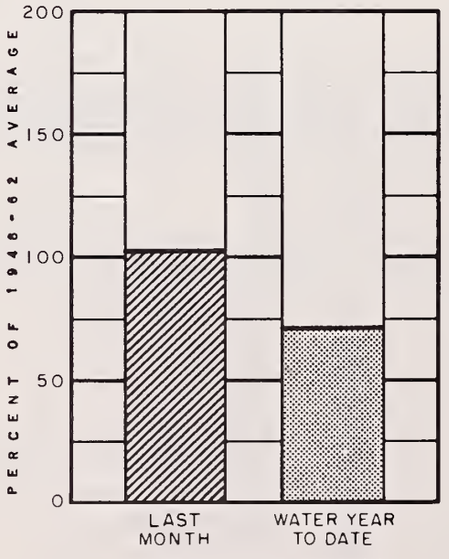
Deschutes at Moody



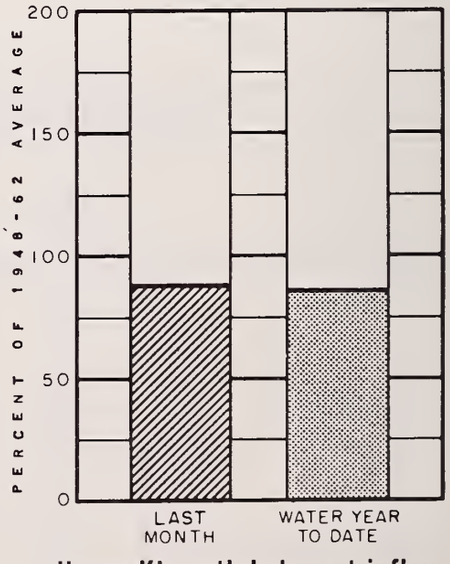
Mid. Fk. Willamette below No. Fk.



Umpqua near Elkton



Rogue at Raygold



Upper Klamath Lake net inflow

Data furnished by U.S. Geological Survey; The Pacific Power and Light Co.; and North and South Boards of Control Owyhee Project.

WATER SUPPLY OUTLOOK
OWYHEE, MALHEUR WATERSHEDS
OREGON

as of

APRIL 1, 1966

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

The outlook for spring and summer water supplies in Malheur County is satisfactory for water users with stored water but is very poor for lands served by direct diversion from streams where flows are now expected to be about half their usual volume.

SNOW COVER

Water content of the mountain snowpack is 65 percent average on the Malheur, 63 percent on the Owyhee and 54 percent average on Jordan Creek. Much of the snow has already melted off and the resulting runoff has been very disappointing. Winds have apparently removed much snow by direct evaporation.

SOIL MOISTURE

Moisture in the top four feet of the soil mantle under the snowpack is about 80 percent of capacity on the Malheur and 84 percent on the Owyhee. Soil moisture is increasing by absorption from current snowmelt.

RESERVOIR STORAGE

Stored water supplies are satisfactory in Malheur County except in Jordan Valley Irrigation District's Antelope Reservoir, where only 16,500 acre feet have been picked up this year. April 15 is the cutoff date for diversion to storage and the total supply is likely to be disappointingly low.

Owyhee Reservoir holds 648,400 acre feet compared with 637,200 acre feet last year and will provide adequate supplies.

Warmsprings Reservoir, on Malheur River, now holds 166,000 acre feet compared with 180,800 acre feet last year. Agency Valley Reservoir holds 38,500 acre feet compared with 54,900 acre feet a year ago. Bully Creek Reservoir has 22,700 acre feet, nearly up to the 28,200 acre feet in storage last year. These are satisfactory stored supplies.

STREAMFLOW

Forecasts of spring and summer streamflow in Malheur County range from a low of 36 percent average or 35,000 acre feet for Jordan Creek between April 1 and July 31, and a "high" of 46 percent average or 30,000 acre feet inflow to Agency Valley Reservoir in the same period.

The April-July inflow to Lake Owyhee is forecast at 156,000 acre feet or 43 percent of average. Malheur River near Drewsey is forecast at 34,000 acre feet or 42 percent average.

Report prepared by
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WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Boulder Creek	Fair	Poor
Bully Creek	Fair	Poor
Cow Creek	Fair	Poor
Jordan Creek	Fair	Poor
Jordan Valley Irrig. Dist.	Fair	Fair
McDermitt Creek	Fair	Poor
Oregon Canyon Creek	Fair	Poor
Owyhee Project	Average	Average
Succor Creek	Fair	Poor
Tenmile Creek	Fair	Poor
Vale-Oregon Irrig. Dist.	Average	Average
Warmsprings Irrig. Dist.	Average	Average
Willow Creek (Reservoired)	Average	Fair

RESERVOIR STORAGE (1,000 Ac. Ft.) April 1, 1966

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Agency Valley	60.0	38.5	54.9	41.4
Antelope	55.0	16.5	47.7	19.6
Bully Creek	30.0	22.7	28.2	- -
Owyhee	715.0	648.4	637.2	483.4
Warmsprings	191.0	166.0	180.8	99.1

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1966

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
1780	Jordan Creek above Lone Tree Creek	35	April-July	98	36
2140	Malheur near Drewsey	34	April-July	80	42
		35	April-Sept.	82	43
2175	Malheur, No. Fk. at Beulah[d]	28	April-July	59	47
		30	April-Sept.	65	46
1825	Owyhee Reservoir net Inflow[k]	156	April-July	364	43
		160	April-Sept.	381	42

SOIL MOISTURE

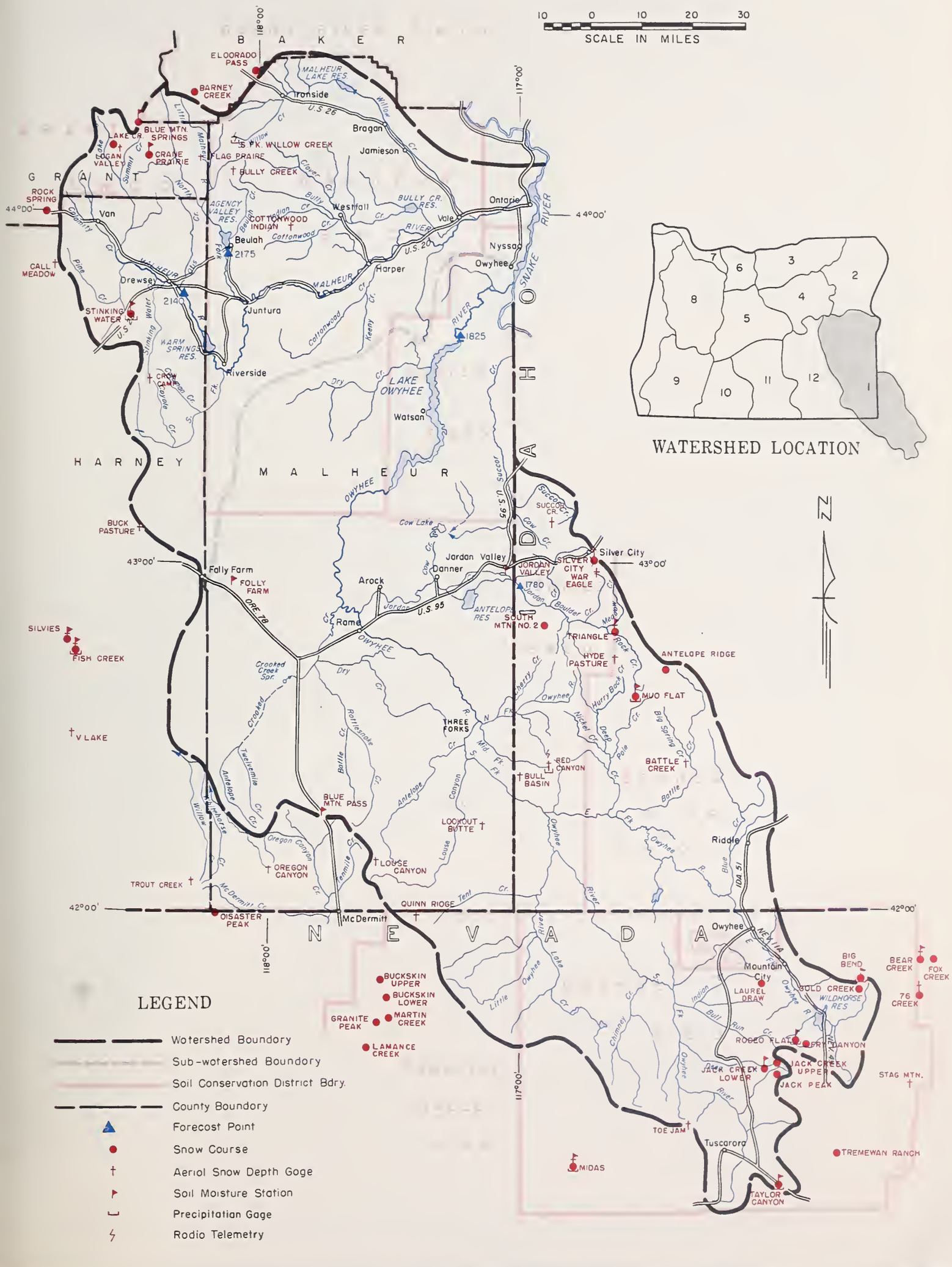
STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Bear Creek (Nev.)	7800	72	16.8	3-28-66	12.1	14.4	10.2
Big Bend (Nev.)	6700	48	16.7	3-28-66	15.4	16.4	15.7
Blue Mountain Springs	5900	42	16.9	3-31-66	8.8	12.3	7.9
Crane Prairie	5375	48	18.2	3-31-66	15.2	17.9	14.9
Folly Farm	4450	30	12.5	3-8-66	8.5[f]	12.1	8.3[f]
Jack Creek, Lower (Nev.)	6800	48	8.6	[b]			
Jordan Valley	4390	48	19.3	3-8-66	14.6[f]	17.1	14.5[f]
Mud Flat (Ida.)	5500	48	12.8	4-1-66	14.4	12.0	9.5
Rodeo Flat (Nev.)	6800	42	11.0	3-28-66	10.6	10.9	10.6
Stinking Water Summit	4800	48	21.9	4-6-66	21.4	21.9	20.8
Taylor Canyon	6200	48	15.1	2-25-66	12.4[f]	15.0	9.0
Triangle (Ida.)	5150	48	16.6	[b]			

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
					LAST YEAR	1948-62 AVERAGE
Antelope Ridge (Ida.)	5900	4/1	0	0.0	2.9	- -
Barney Creek	5950	3/30	22	7.8	12.6	8.7
Battle Creek[e] (Ida.)	5700	4/1	0	0.0	0.0	- -
Bear Creek (Nev.)	7800	3/28	46	16.5	25.7	21.0
Big Bend (Nev.)	6700	3/28	18	5.7	8.2	10.7
Blue Mountain Springs	5900	3/31	30	10.6	22.2	17.3
Buck Pasture[e]	5700	4/1	0	0.0	0.0	- -
Buckskin, Lower (Nev.)	6700	3/28	20	6.5	5.9	9.2[h]
Buckskin, Upper (Nev.)	7200	3/28	27	10.6	7.6	10.3[h]
Bull Basin[e] (Ida.)	5600	4/1	0	0.0	0.0	- -
Bully Creek[e]	5300	4/1	0	0.0	0.0	- -
Call Meadow[e]	5340	4/1	2	0.7	2.3	- -

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (l) Ground measurement. (m) Average for 5 or more years in base period.

OWYHEE, MALHEUR WATERSHEDS



OR-1c

SNOW

SNOW COURSE NAME	ELEVATION	CURRENT INFORMATION: DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	PAST RECORD: WATER CONTENT (Inches) LAST YEAR	1948-62 AVERAGE
Columbia Basin[e] (Nev.)	6650	3/29	2	0.7	4.8	- -
Cottonwood-Indian[e]	4320	4/1	0	0.0	0.0	- -
Crane Prairie	5375	3/31	17	5.5	13.9	10.9
Crow Camp[e]	5500	4/1	0	0.0	0.0	- -
Disaster Peak (Nev.)	6500	3/30	9	2.4	8.9	11.7[h]
Eldorado Pass	4600	3/30	0	0.0	0.0	0.6[h]
Fawn Creek[e] (Nev.)	7000	3/29	2	0.7	0.0	- -
Fish Creek	7900	3/31	47	17.9[j]	35.8	26.9
Flag Prairie[e]	4750	4/1	0	0.0	1.1	- -
Fox Creek (Nev.)	6800	3/28	22	7.9	10.7	10.9
Fry Canyon (Nev.)	6700	3/28	16	6.0	5.0	8.9
Gold Creek (Nev.)	6600	3/28	8	2.7	4.1	6.5
Granite Peak (Nev.)	7800	3/28	28	9.4	18.8	12.5[h]
Hyde Pasture[e] (Ida.)	5800	4/1	0	0.0	1.2	- -
Jack Creek, Lower (Nev.)	6800	3/29	T	T	3.0	3.5
Jack Creek, Upper (Nev.)	7250	3/29	20	7.7	9.8	11.6
Jacks Peak (Nev.)	8420	3/29	63	23.6	34.6	27.5[h]
Lake Creek	5120	4/1	16	6.5	13.5	11.2
Laurel Draw (Nev.)	6700	4/1	15	5.0	7.8	9.5[h]
Logan Valley[e]	5100	4/1	8	3.0	7.9	- -
Lookout Butte[e]	5650	4/1	0	0.0	0.0	- -
Louse Canyon[e]	6440	4/1	T	T	0.8	- -
Martin Creek (Nev.)	6700	3/28	20	7.0	10.0	8.8[h]
Merritt Mountain[e] (Nev.)	7000	3/29	0	0.0	0.9	- -
Midas (Nev.)	7200	3/30	0	0.0	0.0	1.9[h]
Mud Flat (Ida.)	5500	4/1	4	1.4	4.7	4.5[h]
Oregon Canyon[e]	6950	4/1	T	T	1.2	- -
Quinn Ridge[e] (Nev.)	6300	4/1	0	0.0	0.4	- -
Red Canyon[e] (Ida.)	6500	4/1	2	0.7	4.0	- -
Rock Spring	5100	3/28	13	4.4	3.5	5.2
Rodeo Flat (Nev.)	6800	3/28	12	4.9	3.7	8.2
76 Creek (Nev.)	7100	3/28	21	7.3	12.2	14.5[h]
Silver City[e] (Ida.)	6400	3/29	31	10.9[j]	19.7	16.3[h]
Silvies	6900	3/31	18	7.5[j]	14.0	14.0
South Mountain #2 (Ida.)	6340	3/30	15	4.9	12.5	13.2[h]
Stag Mountain[e] (Nev.)	7800	3/29	0	0.0	4.8	- -
Stinking Water	4800	4/6	0	0.0	- -	0.9[h]
Succor Creek[e] (Ida.)	6100	4/1	2	0.7	4.8	- -
Taylor Canyon (Nev.)	6200	3/29	5	1.9	T	3.7
Toe Jam[e] (Nev.)	7700	3/29	22	8.6	6.0	- -
Tremewan Ranch (Nev.)	5700	3/28	0	0.0	0.0	0.7
Triangle[e] (Ida.)	5150	4/1	0	0.0	0.0	- -
Trout Creek[e]	7800	4/1	10	3.5	8.8	- -
"V" Lake[e]	6600	4/1	T	T	2.4	- -
Vaught Ranch[e] (Ida.)	5950	4/1	0	0.0	- -	- -
War Eagle[e] (Ida.)	7700	4/1	43	15.0	- -	- -

Area 2

WATER SUPPLY OUTLOOK
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS
OREGON

as of

APRIL 1, 1966

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

The outlook is only fair for spring and summer water supplies in Baker, Union and Wallowa Counties except for those situations where stored water is available--there the outlook is good. Although precipitation has been a little better than average, the snowpack failed to increase at the expected rate during March.

SNOW COVER

Water content of the mountain snowpack averages about 79 percent of the 15-year average (1948-62) over the whole area but only 64 percent of last year. Snow on the Wallowa and Grande Ronde is 78 percent average, on the Powder 76 percent and on the Burnt 81 percent average. Substantial snowmelt began about March 25th.

SOIL MOISTURE

Moisture in the top four feet of the soil mantle under the snowpack increased slightly to 74 percent of capacity as compared with 88 percent a year ago. The soils will absorb approximately two to six inches of snowmelt water this spring as the watershed is recharged.

RESERVOIR STORAGE

Stored water supplies are well above average and will "save the day" for those irrigators entitled to their use. Unity Reservoir contains 19,600 acre feet compared with 21,400 acre feet last year and an April 1 average storage of 14,100 acre feet. Wallowa Lake contains 32,900 acre feet compared with 29,900 acre feet last year and an average of 18,200 acre feet.

STREAMFLOW

Forecasts of spring and summer streamflow have been lowered slightly and now range from a low of 56 percent of the 15-year average (1948-62) for Burnt River to a high of 82 percent average on the Lostine River and the East Fork of Wallowa. The Powder River is forecast at 69 percent average and the Grande Ronde at 59 percent. Catherine Creek is forecast to flow 70 percent average and Bear Creek at 69 percent average for the April through September period.

Except where stored water supplies are available, the irrigation season will be shorter and lands will receive much less than the usual water.

Flow of the Grande Ronde River* at La Grande was 52 percent average during March but has averaged only 32 percent since October 1, 1965.

* Preliminary data from U. S. Geological Survey, Portland, Oregon.

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WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Alder Slope	Average	Fair
Baker Valley	Fair	Fair
Big Creek	Fair	Fair
Clover Cr. (nr. N. Powder)	Fair	Fair
Cove	Fair	Fair
Durkee	Fair	Fair
Eagle Valley	Fair	Fair
Elgin	Fair	Fair
Enterprise-Joseph	Average	Average
Hereford-Bridgeport	Average	Average
Imnaha River	Average	Fair
La Grande-Island City	Fair	Fair
Lostine-Wallowa	Average	Fair
No. Powder River-Wolf Cr.	Fair	Fair
Pine Valley	Fair	Fair
Powder River-Elk Creek	Fair	Fair
Summerville	Fair	Fair
Sumpter Valley	Fair	Fair
Union-Hot Lake	Average	Fair
Unity	Fair	Fair

RESERVOIR STORAGE (1,000 Ac. Ft.) April 1, 1966

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Unity	25.2	19.6	21.4	14.1
Wallowa Lake	37.5	32.9	29.9	18.2

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1966

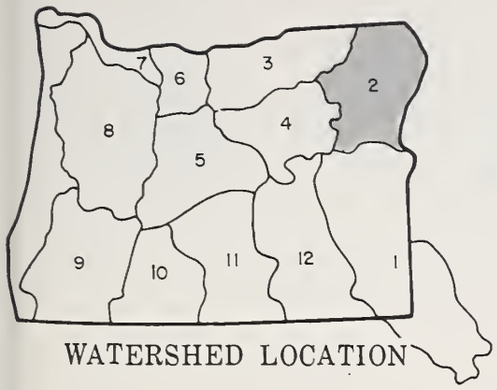
FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
3305	Bear near Wallowa	50	April-Sept.	72	69
2730	Burnt near Hereford[d]	22	April-June	39	56
		23	April-Sept.	41	56
3200	Catherine near Union	51	April-Sept.	73	70
3190	Grande Ronde at LaGrande	118	April-July	200	59
		120	April-Sept.	203	59
3295	Hurricane near Joseph	36	April-Sept.	48	75
2920	Imnaha at Imnaha	230	April-Sept.	318	72
3300	Lostine near Lostine	107	April-Sept.	131	82
2755	Powder near Baker	45	April-July	66	68
		46	April-Sept.	67	69
3250	Wallowa, East Fork near Joseph[d]	8.0	April-July	9.7	83
		9.8	April-Sept.	12.0	82

SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Blue Mountain Summit	5100	36	16.8	3-31-66	9.9	15.6	9.7
Emigrant Springs	3925	48	22.3	3-30-66	18.3	20.9	21.8
Tollgate	5070	48	23.6	3-29-66	18.3	18.9	19.0

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS



WATERSHED LOCATION

10 0 10 20 30
SCALE IN MILES

WASHINGTON

46°00'

117°00'

45°00'

118°00'

UMATILLA

UNION

WALLOWA

GRANT

BAKER

MALHEUR

IDAHO

SNAKE RIVER

TOLLGATE

Elgin

Wallowa

Summerville

MEACHAM

LaGrande

Starkey

Cove

Union

North Powder

Medical Springs

Enterprise

Joseph

Imnaha

Haines

Keating

Holfway

Pine

Richland

Baker

Sumpter

Durkee

Hereford

Bridgeport

Unity

Huntington

LUCKY STRIKE

SCHOOLMARM

COUNTY LINE

BEAVER RES.

LITTLE ALPS

ANTHONY LAKE

EICERTSON MEADOWS

GOLO CENTER

GOODRICH LAKE

TIPTON

BLUE MTN. SUMMIT

UNITY RES.

BARNEY CREEK

ELOORADO PASS

DOOLEY MTN.

LADD SUMMIT

THIEF VALLEY RES.

MOSS SPRING

BALD MTN.

MIRROR LAKE

TV RIDGE

STANLEY

WALLOWA LAKE RES.

ANEROID LAKE NO. 2

ANEROID LAKE NO. 1

BIG SHEEP

TAYLOR GREEN

SCHNEIDER MEADOWS

OXBOW RES.

BROWNLEE RES.

3190

3305

3300

3295

3250

3200

2920

2755

2730

ORE. 82

ORE. 204

ORE. 3

ORE. 86

U.S. 30

LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- Forecast Point
- Snow Course
- Soil Moisture Station
- Aerial Snow Depth Gage
- Precipitation Gage

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
					WATER CONTENT (Inches)	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	LAST YEAR	1948-62 AVERAGE
Aneroid Lake #1	7480	4/2	81	32.0	50.2	38.9[h]
Aneroid Lake #2	7300	4/2	75	26.0	45.6	34.6
Anthony Lake	7125	3/29	58	23.0	41.1	28.9
Anthony Ski Hill		[b]				
Bald Mountain[e] (Ore.)	6700	4/2	42	16.8	27.6	- -
Barney Creek	5950	3/30	22	7.8	12.6	8.7
Beaver Reservoir	5340	3/28	32	10.1	13.0	12.8
Big Sheep[e]	6200	4/2	45	18.0	35.3	- -
Blue Mountain Summit	5098	3/31	17	6.2	10.5	8.6
Bourne	5800	3/28	35	12.6	19.9	16.3
County Line	4800	3/30	14	5.6	7.4	7.6
Dooley Mountain	5430	3/29	15	5.0	11.7	9.3
Eilertson Meadows	5400	3/25	36	13.0	17.0	12.2
Eldorado Pass	4600	3/30	0	0.0	0.0	0.6[h]
Gold Center	5340	3/28	34	13.2	14.9	13.7
Goodrich Lake	6775	3/29	80	33.4	40.0	38.8[h]
Intake House	4930	3/25	40	11.3	13.8	- -
Little Alps	6200	3/29	40	14.1	21.6	- -
Little Antone	5000	3/29	13	4.5	6.8	- -
Lucky Strike	5050	3/29	34	11.7	19.5	14.6[h]
Meacham	4300	3/30	24	9.8	13.1	9.5
Mirror Lake[e]	8200	4/2	110	49.0	97.1	- -
Moss Spring	5850	4/2	41	16.4	30.2	26.2
Power Plant	3990	3/25	15	4.5	6.4	- -
Schneider Meadows	5400	3/25	64	24.6	33.5	32.4
Schoolmarm	4775	3/30	12	5.0	4.8	5.2[h]
Standley	7400	4/2	46	18.0	31.0	- -
Taylor Green	5740	4/2	28	11.2	20.0	18.8
Tipton	5100	3/31	19	7.2	12.0	11.0[h]
Tollgate	5070	3/29	65	26.9	26.9	29.9
TV Ridge	7000	4/2	45	16.0	28.0	- -

"The Conservation of Water begins with the Snow Survey"

Area 3

WATER SUPPLY OUTLOOK
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS
OREGON

as of

APRIL 1, 1966

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

The outlook for spring and summer water supplies in Umatilla, Morrow and Gilliam Counties is slightly below average, and the users from McKay Reservoir will have a short supply unless they practice good water management.

SNOW COVER

Water content of the mountain snowpack is down slightly to 92 percent of the 15-year average (1948-62) and about equal to last year's water content. Recent high temperatures and winds have removed much of the extra heavy snow which was present at median elevations.

SOIL MOISTURE

Moisture in the top four feet of the soil mantle under the snowpack is about 81 percent of the capacity compared with 86 percent of capacity a year ago. These soils will continue to absorb snowmelt water.

RESERVOIR STORAGE

Stored water supplies in McKay Reservoir are currently only 36,700 acre feet compared with 63,400 acre feet a year ago and the average storage of 54,000 acre feet. If this reservoir receives the inflow now forecast, the total available water will be less than 60,000 acre feet.

Cold Springs Reservoir now contains 49,200 acre feet and will surely fill in the next few days.

STREAMFLOW

Forecasts for spring and summer streamflow call for 86 percent average (1948-62 period) flows on the South Fork of the Walla Walla River. The Umatilla near Gibbon is forecast at 86 percent average and at Pendleton 82 percent average.

Inflow to McKay Reservoir is forecast at 23,000 acre feet or 72 percent of the 15-year average (1948-62). It will require one or two extra good rainstorms to improve this situation measurably.

Butter Creek is forecast to flow 90 percent of the average.

Flow of smaller streams, heading in lower elevations, is expected to be slightly below average in volume this year.

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WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Birch Creek	Average	Average
Butter Creek	Average	Average
Couse Creek	Average	Average
Dry Creek	Average	Average
Dugger Creek	Average	Average
Johnson Creek	Average	Average
McKay Creek	Average	Fair
Mill Creek	Average	Average
Mud Creek	Average	Average
Pine Creek	Average	Average
Rhea Creek	Average	Average
Rock Creek	Average	Average
Umatilla R. (Cold Springs Reservoir)	Average	Average
Umatilla River, Main	Average	Average
Umatilla River (McKay Res.)	Average	Fair
Walla Walla River, Little	Average	Average
Walla Walla River, Main	Average	Average
Walla Walla River, No. Fk.	Average	Average
Walla Walla River, So. Fk.	Average	Average
Willow Creek	Average	Average

RESERVOIR STORAGE (1,000 Ac. Ft.) April 1, 1966

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Cold Springs Camp	50.0	49.2	50.0	48.1
McKay	73.8	36.7	63.4	54.0

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1966

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
0320	Butter Creek near Pine City	8.8	April-July	9.8	90
0225	McKay near Pilot Rock	23	April-Sept.	32	72
0200	Umatilla near Gibbon	77	April-July	88	88
		80	April-Sept.	93	86
0210	Umatilla at Pendleton	148	April-July	178	83
		150	April-Sept.	183	82
0100	Walla Walla, South Fork near Milton	54	April-July	62	87
		65	April-Sept.	76	86

SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Athena-Weston	1700	48	18.7	3-29-66	14.2	14.0	13.8
Battle Mountain Summit	4340	48	13.8	3-30-66	12.9	13.8	13.1
Emigrant Springs	3925	48	22.3	3-30-66	18.3	20.9	21.8
Tollgate	5070	48	23.6	3-29-66	18.3	18.9	19.0

SNOW

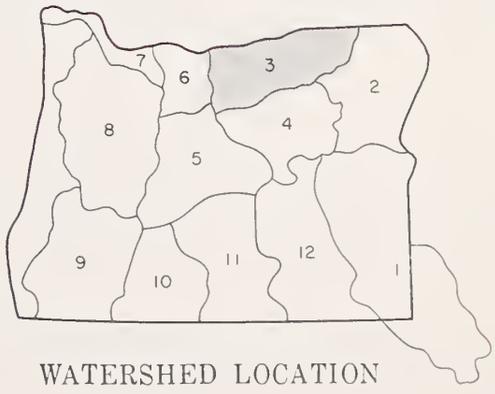
SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
					LAST YEAR	1948-62 AVERAGE
Arbuckle Mountain	5400	3/24	39	13.9	15.0	12.7
Battle Mountain Summit	4340	3/30	1	0.3	2.4	2.2[m]
Blue Mountain Camp	4300	3/29	41	16.2	14.2	- -
Emigrant Springs	3925	3/30	13	5.3	2.2	5.1
Lucky Strike	5050	3/29	34	11.7	19.5	14.6[h]
Meacham	4300	3/30	24	9.8	13.1	9.5
Tollgate	5070	3/29	65	26.9	26.9	29.9
Walla Walla Diversion	2400	3/28	0	0.0	0.0	0.0[h]
Weston Mountain	2700	3/29	0	0.0	0.0	- -

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records.

UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS

LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- Forecast Point
- Snow Course
- Soil Moisture Station
- Precipitation Gage



WATERSHED LOCATION

Area 4

WATER SUPPLY OUTLOOK
UPPER JOHN DAY WATERSHEDS
OREGON

as of

APRIL 1, 1966

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

The outlook for spring and summer water supplies in the John Day County has been further dimmed with March storms producing far below the expected amount of snowfall. Flow of streams in Grant and Wheeler Counties is forecast to be less than two-thirds of the average.

SNOW COVER

Water content of the mountain snowpack averages about 76 percent of the 15-year average (1948-62) and only 64 percent of last year. Most snow courses below 5200 feet elevation lost snow with the melt season beginning about March 25th.

SOIL MOISTURE

Moisture in the top four feet of the soil mantle under the snowpack increased slightly to 77 percent of capacity as compared with a high 92 percent last year. These soils will absorb approximately two to six inches of snowmelt water as the watershed is recharged.

STREAMFLOW

Forecasts of spring and summer streamflow have been lowered slightly and now range from 60 to 61 percent of the 15-year average (1948-62) for the John Day at Prairie City and the Middle Fork at Ritter. The forecast is 68 percent average for Strawberry Creek.

Flow of smaller streams heading in lower elevations will probably be close to average in the freshet period but will fall off several weeks earlier than usual.

Flow of the John Day River* at Service Creek has averaged 53 percent during March but only 44 percent during the period since October 1, 1965.

* Preliminary data from U. S. Geological Survey, Portland, Oregon.

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WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Beech Creek	Average	Fair
Beech Creek-Fox-Long Cr.	Average	Fair
Bridge-Mountain Creeks	Average	Fair
Camas Creek	Average	Fair
Indian-Pine Creeks	Average	Fair
John Day River, Main Fork	Average	Fair
John Day River, Mid. Fork	Average	Fair
John Day River, N. Fork	Average	Fair
John Day River S. Fork	Average	Fair
Monument-Kimberly	Average	Fair
Strawberry Creek	Average	Fair

RESERVOIR STORAGE (1,000 Ac. Ft.) April 1, 1966

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1966

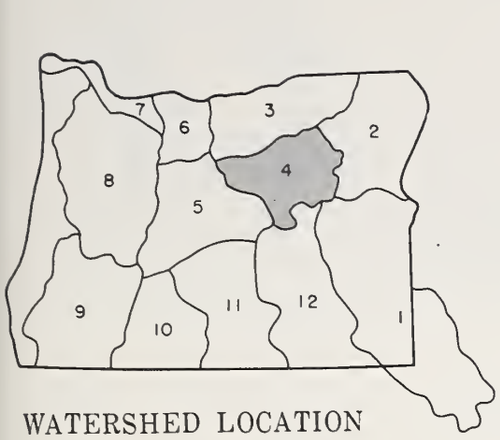
FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
0385	John Day at Prairie City	28	April-July	46	61
		31	April-Sept.	51	60
0440.	John Day, Middle Fork at Ritter	77	April-July	127	61
		80	April-Sept.	131	61
0375	Strawberry near Prairie City	5.6	April-July	8.1	69
		6.0	April-Sept.	8.8	68

SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Battle Mountain Summit	4340	48	13.8	3-30-66	12.9	13.8	13.1
Blue Mountain Springs	5900	42	16.9	3-31-66	8.8	12.3	7.9
Blue Mountain Summit	5100	36	16.8	3-31-66	9.9	15.6	9.7
Derr	5670	24	9.0	3-28-66	8.5	8.9[f]	- -
Marks Creek	4540	36	14.1	3-31-66	13.6	13.6	9.3
Snow Mountain	6300	48	16.7	3-29-66	12.3	15.9	12.4
Starr Ridge	5150	36	10.6	3-30-66	9.0	10.4	8.5

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

UPPER JOHN DAY WATERSHEDS



WATERSHED LOCATION

10 0 10 20 30
SCALE IN MILES

LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- Forecast Point
- Snow Course
- Soil Moisture Station
- Aeriol Snow Depth Gage
- Precipitation Gage

OR-4c

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
					WATER CONTENT (Inches)	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	LAST YEAR	1948-62 AVERAGE
Anthony Lake	7125	3/29	58	23.0	41.1	28.9
Arbuckle Mountain	5400	3/24	39	13.9	15.0	12.7
Battle Mountain Summit	4340	3/30	1	0.3	2.4	2.2[m]
Beech Creek Summit	4800	3/30	8	2.9	3.4	4.6
Blue Mountain Springs	5900	3/31	30	10.6	22.2	17.3
Blue Mountain Summit	5098	3/31	17	6.2	10.5	8.6
Derr	5670	3/28	27	10.0	12.5	11.0
East Fork Canyon[e]	5700	Report	delayed			
Gold Center	5340	3/28	34	13.2	14.9	13.7
Indian Creek Butte[e]	6550	Report	delayed			
Izee Summit	5293	3/30	17	5.4	8.0	8.8
Lucky Strike	5050	3/29	34	11.7	19.5	14.6[h]
Marks Creek	4540	3/31	5	1.7	1.0	2.4
Ochoco Meadows	5200	3/30	23	8.6	8.4	11.6
Olive Lake	6000	3/26	53	18.0	30.9	22.5
Schoolmarm	4775	3/30	12	5.0	4.8	5.2[h]
Snow Mountain	6300	3/29	29	10.2	17.2	14.7
Starr Ridge	5150	3/30	4	1.3	7.5	5.3
Tipton	5100	3/31	19	7.2	12.0	11.0[h]
Williams Ranch	4500	3/30	0	0.0	- -	- -

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
UPPER DESCHUTES, CROOKED WATERSHEDS
OREGON

as of

APRIL 1, 1966

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

The outlook for spring and summer water supplies in Crook, Deschutes, and Jefferson Counties is very near average for water users having access to stored water. Others, without stored water, will have water supplies ranging from near average on Tumalo and Squaw Creeks on down to 64 percent average on Crooked River and Ochoco Creeks and even less, probably about half-average, on smaller streams like Trout, Bear, Camp and Beaver Creeks.

SNOW COVER

Water content of the mountain snowpack is 81 percent of the 15-year average (1948-62) on the Crooked watershed and 96 percent on the Deschutes. Many snow courses lost water rather than gaining it as is more usual between March 1 and April 1. The excess snow at low or moderate elevations a month ago has mostly melted off and will not produce heavier than average spring freshets.

SOIL MOISTURE

Moisture in the top four feet of the soil mantle under the snowpack increased slightly to 86 percent of capacity as compared with a high of 96 percent measured last year.

RESERVOIR STORAGE

Stored water supplies are excellent and vary from about average to well above average. On the Crooked watershed, Ochoco and Prineville Reservoirs contain 32,100 and 127,400 acre feet, respectively.

On the Deschutes watershed, Crane Prairie and Wickiup Reservoirs hold 49,400 and 201,300 acre feet, respectively, while Crescent Lake holds 63,600 acre feet.

STREAMFLOW

Forecasts of spring and summer streamflow have been lowered to 62 percent average on Ochoco Creek and 64 percent average on Crooked River.

The Deschutes at Benham Falls is forecast at 555,000 acre feet or 88 percent average with Tumalo and Squaw Creeks forecast at 93 and 95 percent average for the April-September period.

Flow of the Deschutes River* at Moody has averaged 85 percent during March and 73 percent average since October 1, 1965.

* Preliminary data furnished by U. S. Geological Survey, Portland, Oregon.

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WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Arnold Irrigation District	Average	Average
Bear Creek	Fair	Fair
Beaver Creek	Fair	Fair
Camp Creek	Fair	Fair
Central Ore. Irrig. Dist.	Average	Average
Crooked River	Fair	Fair
Deschutes River	Average	Average
Hay-Trout Creeks	Fair	Fair
Lone Pine Irrig. Dist.	Average	Average
Mill Creek	Fair	Fair
North Unit Irrig. Dist.	Average	Average
Ochoco Creek	Fair	Fair
Sisters Irrigation Dist.	Average	Average
Snow Creek Irrig. Dist.	Average	Average
Squaw Creek Irrig. Dist.	Average	Average
Swalley Ditch	Excellent	Excellent
Tumalo Project	Average	Average
Walker Basin Irrig. Dist.	Average	Average

RESERVOIR STORAGE (1,000 Ac. Ft.) April 1, 1966

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Crane Prairie	55.3	49.4	56.3	46.5
Crescent Lake	117.2*	63.6	70.8	51.2
Ochoco	47.5	32.1	40.5	32.1
Prineville	153.0	127.4	139.2	- -
Wickiup	200.0	201.3	202.1	188.2

*Includes space for 25,790 a.f. for flood storage only.

Note: Storage figures for Crescent Lake include 5,360 a.f. of known dead and inactive storage.

SOIL MOISTURE

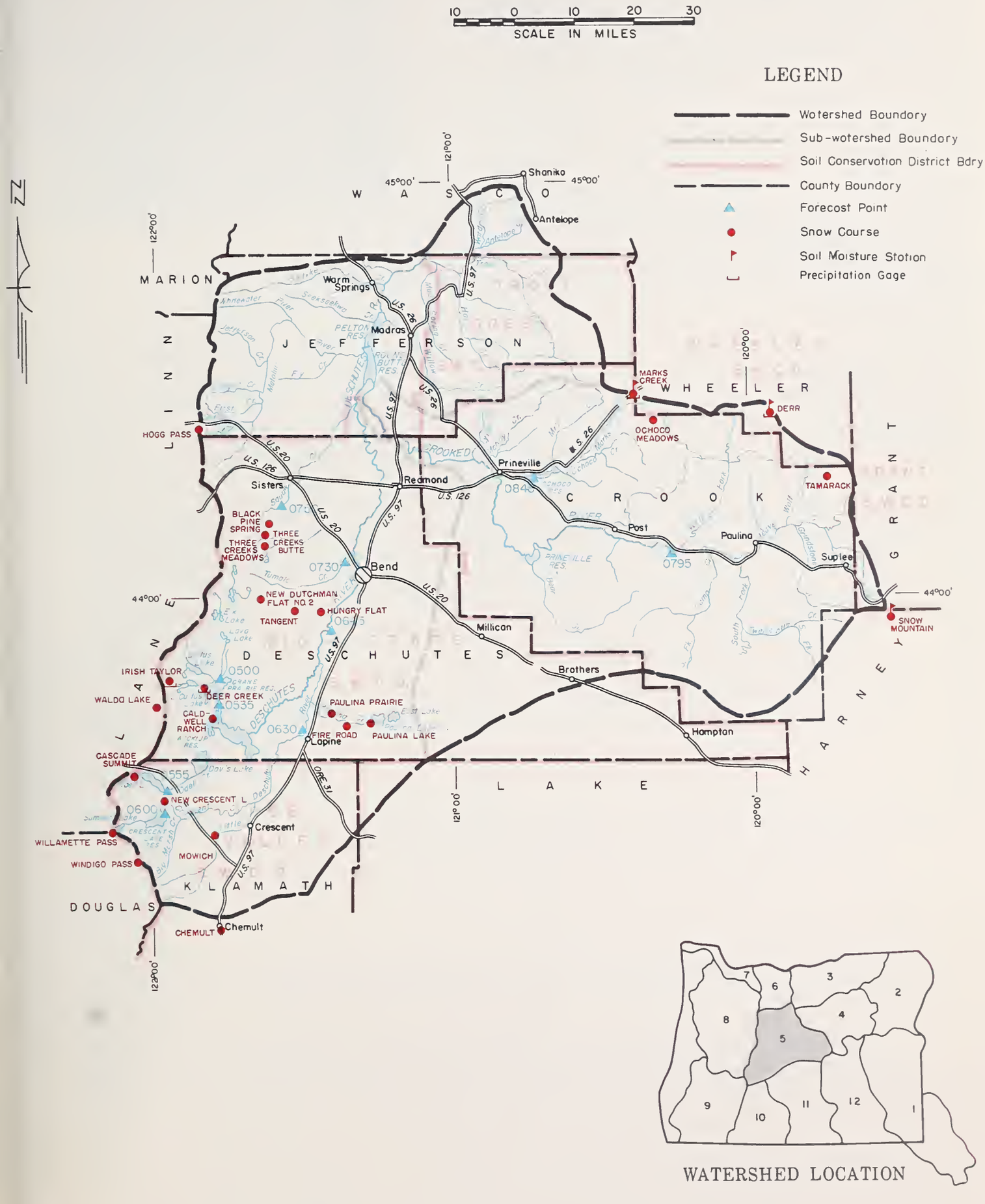
STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Derr	5670	24	9.0	3-28-66	8.5	8.9[f]	- -
Marks Creek	4540	36	14.1	3-31-66	13.6	13.6	9.3
Snow Mountain	6300	48	16.7	3-29-66	12.3	15.9	12.4

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1966

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
0535	Crane Prairie Reservoir total Inflow	82	April-July	94	88
		125	April-Sept.	143	87
0600	Crescent at Crescent Lake[d]	23	April-July	26	88
		29	April-Sept.	33	87
0795	Crooked near Post	78	April-July	123	63
		80	April-Sept.	125	64
0645	Deschutes at Benham Falls[d]	370	April-July	417	89
		555	April-Sept.	631	88
0500	Deschutes below Snow Creek	66	April-Sept.	75	88
0630	Deschutes, Little near Lapine[d]	83	April-July	99	84
		94	April-Sept.	113	83
0848	Ochoco Reservoir net Inflow	20	April-Sept.	32	62
0555	Odell near Crescent	30	April-Sept.	34	88
0750	Squaw near Sisters	53	April-Sept.	56	95
0730	Tumalo near Bend[d]	50	April-Sept.	54	93

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

UPPER DESCHUTES, CROOKED WATERSHEDS



WATERSHED LOCATION

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
					WATER CONTENT (Inches)	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	LAST YEAR	1948-62 AVERAGE
Black Pine Spring	4600	4/1	0	0.0	0.0	5.2[h]
Caldwell Ranch	4400	3/28	26	11.2	2.0	11.0
Cascade Summit	4880	3/28	96	40.8	32.5	36.2
Chemult	4760	3/29	28	12.1	4.3	10.5
Deer Creek	4554	3/28	54	19.7	17.7	- -
Derr	5670	3/28	27	10.0	12.5	11.0
Fire Road	5050	3/27	20	7.7	- -	6.7[h]
Hogg Pass	4755	3/30	124	54.4	43.4	49.7
Hungry Flat	4400	3/27	16	6.9	0.0	4.2[h]
Irish Taylor	5500	3/28	98	39.4	40.5	44.6[h]
Marks Creek	4540	3/31	5	1.7	1.0	2.4
Mowich	4700	3/31	8	4.6	0.0	2.9[h]
New Crescent Lake	4800	3/29	41	14.9	11.3	17.8
New Dutchman Flat #2	6400	3/27	126	53.4	62.4	57.7
Ochoco Meadows	5200	3/30	23	8.6	8.4	11.6
Paulina Lake	6330	3/27	51	18.8	- -	22.0[h]
Paulina Prairie	4285	3/27	0	0.0	- -	0.3[h]
Snow Mountain	6300	3/29	29	10.2	17.2	14.7
Tamarack	4800	3/30	8	2.8	2.8	- -
Tangent	5400	3/27	68	28.2	22.3	25.0[h]
Three Creeks Butte	5200	4/1	22	10.6	0.8	12.9[h]
Three Creeks Meadows	5650	4/1	55	22.7	20.5	23.6
Waldo Lake	5500	3/29	84	33.1	32.6	34.5
Willamette Pass	5600	3/30	110	45.6	41.5	46.3[h]
Windigo Pass	5800	3/31	99	40.3	50.1	48.7

"The Conservation of Water begins with the Snow Survey"

Area 6

WATER SUPPLY OUTLOOK
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS
OREGON

as of

APRIL 1, 1966

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

The outlook for spring and summer water supplies in the Hood River-Wasco County area is very good with soil moisture and snowpacks a little better than average.

SNOW COVER

Water content of the mountain snowpack is 120 percent of the 15-year average (1948-62) on the Hood River watershed, 134 percent average on the Mile Creeks watersheds and 105 percent average on White River watershed.

Snowmelt in the last ten days has partially reduced the unusually heavy snow accumulation in the low and median elevations.

SOIL MOISTURE

Moisture in the top four feet of the soil mantle under the snowpack is close to average but nears the saturation point at median elevations near the present snowline.

RESERVOIR STORAGE

Stored water in Clear Lake (Wasco Lake) Reservoir is reported to be about 2,000 acre feet compared with 6,400 acre feet a year ago. Runoff from snowmelt should soon begin to bring up the storage level on this water source for the Juniper Flat Irrigation District.

STREAMFLOW

Forecasts of spring and summer streamflow, April through September, indicate a 98 percent average flow for Hood River and a 102 percent average flow for White River.

Flow of the Mile Creeks should be somewhat above average--the best since 1949 or 1950. Flow of other streams such as Badger, Rock, Gate, Threemile, Tygh, Mill and Mosier Creeks should be similarly better than average this year.

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WATER SUPPLY OUTLOOK expressed as "Poor", "Fair", "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Aldridge Ditch (Tony Creek)	Average	Average
Badger Creek	Average	Average
Dee Irrigation District	Average	Average
East Fork Irrig. Dist.	Average	Average
Farmers Irrigation Dist.	Average	Average
Hood River Irrig. Dist.	Average	Average
Juniper Flat	Average	Average
Middle Fork Irrig. Dist.	Average	Average
Mile Creeks	Average	Average
Mill Creek	Average	Average
Mount Hood Irrig. Dist.	Average	Average
Rock-Gate-Threemile Crs.	Average	Average
Tygh Creek	Average	Average
White River	Average	Average

RESERVOIR STORAGE (1,000 Ac. Ft.) April 1, 1966

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Clear Lake	11.9	1.9	6.4	- -

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1966

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
1210	Hood near Hood River[d]	320	April-July	322	99
		375	April-Sept.	381	98
1185	Hood, West Fork near Dee	150	April-July	155	97
		175	April-Sept.	179	98
1015	White below Tygh Valley	165	April-July	158	104
		180	April-Sept.	176	102

SNOW

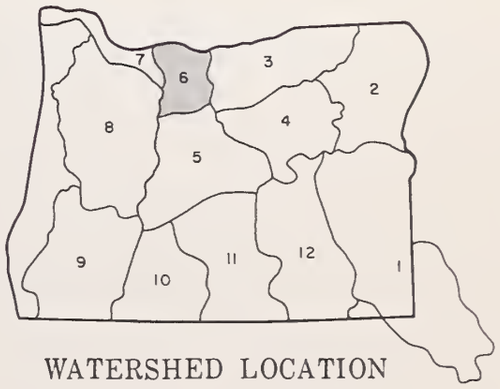
SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches) LAST YEAR	WATER CONTENT (Inches) 1948-62 AVERAGE
Brooks Meadows	4300	4/1	45	19.5	4.5	14.5
Clear Lake	3500	3/29	41	17.2	11.0	14.5
Clear Lake (Experimental)	3500	3/29	60	24.9	18.5	- -
Cooper Spur	3490	4/1	32	14.2	- -	- -
Greenpoint Reservoir	3400	3/30	62	28.3	19.9	19.2
Knebal Springs	3850	4/1	22	9.6	6.8	- -
Lambert Point	7000	Not surveyed				
Parkdale	1770	c				
Phlox Point	5600	3/28	156	68.4	59.7	70.4
Red Hill	4400	4/2	123	57.5	39.7	52.9
Still Creek	3700	3/28	79	34.1	25.1	29.3
Switchback	3255	4/1	54	25.0	12.1	- -
Tilly Jane	6000	3/27	135	60.6	49.4	50.1
Ulrich Ranch Junction	3350	4/1	13	5.1	0.0	- -
Umbrella Falls	5400	3/31	171	77.0	73.9	- -
Upper Valley	2530	c				

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS

LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- Forecast Point
- Snow Course
- Aerial Snow Depth Gage
- Soil Moisture Station
- Precipitation Gage



WATERSHED LOCATION

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
LOWER COLUMBIA WATERSHEDS
OREGON

as of

APRIL 1, 1966

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

As of April 1, water supply outlook for the Columbia Basin remains good for both irrigation and power during the summer season. Streamflow forecasts for the summer months are near average for the Columbia River above Grand Coulee. Forecasts for the Snake River and its tributaries are in the general range of 80 percent of average. Flow of the Columbia at The Dalles is forecast at 101,200,000 acre feet or 93 percent average, April through September. Reservoir storage is high on streams serving irrigated areas along the Snake River and its tributaries in Idaho and eastern Oregon. The major power reservoirs have less than average storage at this time.

SNOW COVER

Seasonal snow accumulation has ranged from 90 to 100 percent of average for the Upper Columbia and about 80 percent of average for the headwaters of the Snake River. Greater deficiencies have been measured on the Owyhee, particularly in northern Nevada and on the Malheur in Oregon. Heavy midwinter storms in the Cascades of Oregon and southwestern Washington have left a snowpack of about 115 percent of average for this date.

SOIL MOISTURE

Soil moisture tends to be near average at mountain elevations, except for the upper Snake River where soil moisture under the snowpack is wetter than usual. Since there has been substantial melt in recent weeks, soils are becoming wet at medium elevations. Valley soils are drying out and will require early irrigation unless there is substantial rainfall within a few days.

STREAMFLOW

The flow of the Columbia at The Dalles, Oregon has been below average during the winter months reflecting general streamflow conditions over the basin. Flow was particularly low in February. The record by months for The Dalles* is as follows:

Month	Percent of Average Discharge (1948-62)
October	93 (Adjusted for storage)
November	95 " " "
December	87 " " "
January	92 " " "
February	70 " " "
March	87 " " "

* Preliminary data from U. S. Geological Survey, Portland, Oregon.

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STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1966

FORECAST POINT NO.	FORECAST POINT NAME	FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
1057	Columbia at The Dalles	69,000 101,200	April-June April-Sept.	74,000 109,000	93 93

HISTORICAL DATA (Columbia River at The Dalles)

YEAR	STREAMFLOW[d] (1,000 A.F.) APR.— SEPT.	APR.— JUNE	MAY—JUNE	PEAK (1,000 c.f.s)	DATE
1943	115,000	75,300	52,400	541	June 21
1944	61,900	39,200	32,100	326	June 19
1945	81,600	54,600	47,300	505	June 8
1946	108,100	75,400	59,600	581	May 30
1947	100,300	70,000	56,800	536	May 11
1948	130,500	94,600	81,900	999	May 31
1949	95,700	71,400	56,000	622	May 18
1950	120,400	74,700	61,200	744	June 25
1951	113,000	75,600	59,100	597	May 26
1952	107,700	77,500	57,300	557	May 28
1953	100,600	64,900	55,800	609	June 17
1954	119,500	70,500	59,300	561	May 23
1955	99,500	58,300	50,300	545	June 26
1956	131,400	96,900	75,800	815	June 3
1957	105,700	80,500	67,200	700	May 22
1958	97,700	72,000	58,600	593	May 31
1959	112,500	71,900	58,900	555	June 23
1960	97,000	64,000	48,000	442	June 6
1961	101,400	74,400	64,000	699	June 8
1962	94,600	64,100	49,200	460	June 5
1948-62 Avg.	108,500	74,100	60,200	633	
1963	87,000	56,300	46,200	437	June 18
1964	109,020	70,739	61,313	662	June 18

LOWER COLUMBIA RIVER FLOOD STAGES (with 9.5' tide at Astoria)

VANCOUVER GAGE (Weather Bu.)	FLOW AT THE DALLES (1,000 c.f.s)	DRAINAGE DISTRICT PUMPHOUSE SANDY	SAUVIE ISL.	SCAPPOOSE	DEER ISL.	RAINIER	BEAVER	WOODSON
		RIVER MILES 118.9	96.0	91.0	77.0	62.0	52.0	47.0
35 (1894)	1210	41.2	34.2	33.3	28.5	21.9	17.5	15.5
34	1160	40.5	33.5	32.5	27.7	21.2	17.0	15.0
33	1100	39.6	32.4	31.4	26.7	20.2	16.1	14.3
32	1050	38.9	31.5	30.5	25.7	19.5	15.4	13.7
31 (1948)	1000	38.0	30.7	29.5	25.1	18.8	14.7	13.0
30	943	36.6	29.5	28.5	24.3	18.1	14.0	12.4
29	897	35.5	28.5	27.7	23.7	17.5	13.4	11.8
28	853	34.3	27.5	26.7	22.8	17.0	13.0	11.4
27 (1956)	811	33.0	26.5	25.6	21.8	16.2	12.5	11.0
26 (1950)	771	32.1	25.5	24.6	20.9	15.5	12.2	10.7
25	733	30.7	24.2	23.2	19.7	14.6	11.7	10.3
24	697	29.7	23.0	22.2	19.0	14.1	11.4	10.2
23	662	29.0	22.3	21.4	18.4	13.6	11.2	10.0
22	628	28.1	21.4	20.3	17.2	13.0	10.9	9.7
21	595	27.2	20.7	19.5	16.4	12.6	10.6	9.6
20 (1954)	564	26.2	19.8	18.6	15.5	12.1	10.2	9.4
19	534	25.5	19.2	18.0	15.0	11.8	10.0	9.3
18	501	24.4	18.3	17.2	14.3	11.4	9.8	9.1
17	479	23.4	17.4	16.4	13.7	11.0	9.6	8.9
16	452	22.4	16.5	15.5	13.0	10.5	9.3	8.7

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records.

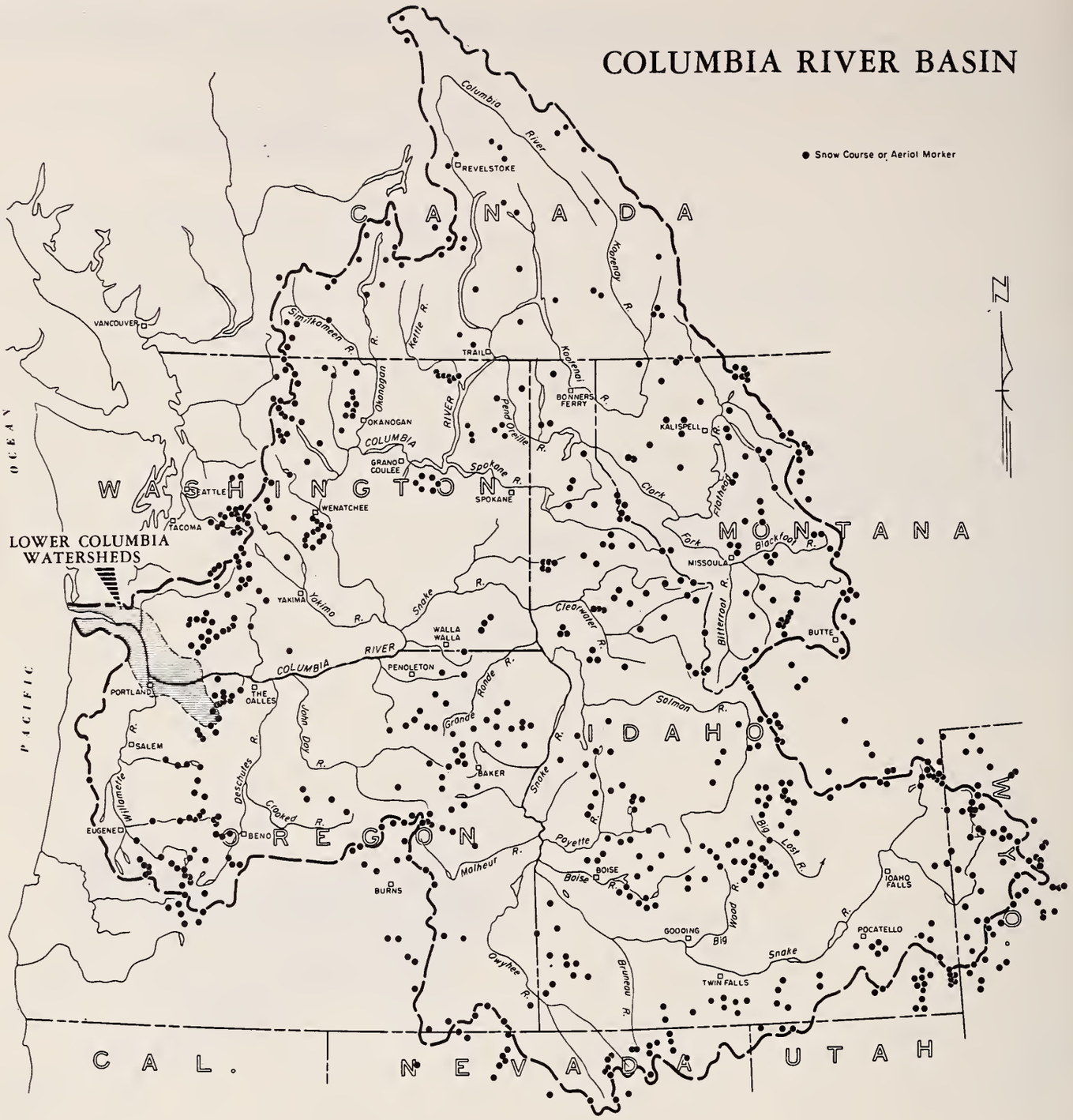
LOWER COLUMBIA WATERSHEDS

WATERSHED LOCATION

LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- (50) River Miles
- Snow Course

Lower Columbia Watersheds



"The Conservation of Water begins with the Snow Survey"

Area 8

WATER SUPPLY OUTLOOK
WILLAMETTE WATERSHEDS
OREGON

as of

APRIL 1, 1966

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

The outlook for spring and summer water supplies in the Willamette Valley is very good with March storms bringing more than average amounts of snow to the mountains.

SNOW COVER

Water content of the mountain snowpack totals about 116 percent of the April first average on Willamette watersheds but is unevenly distributed as follows: 137 percent average on the Coast Fork, 114 percent on the Middle Fork, 119 percent on the McKenzie, 118 percent on the Santiam, 116 percent on the Clackamas and 105 percent on the Sandy River, a direct tributary to Columbia River.

Snowmelt in the last ten days has partially reduced the unusually heavy snow accumulation in the low and median elevations.

SOIL MOISTURE

Moisture in the top four feet of the soil mantle under the snowpack is close to the average. Soils at the lower elevations near the snowline are rapidly nearing saturation.

RESERVOIR STORAGE

Water held in eight multi-purpose reservoirs on the Willamette is close to the average amount stored at this date. These reservoirs can be filled rapidly as snowmelt runoff reaches the main stems of the tributary streams.

STREAMFLOW

Forecasts of spring and summer streamflow (April through September) of the major Willamette tributaries are as follows: 107 percent of the 15-year average (1948-62) on the Clackamas River, 100 percent on the North Santiam, 99 percent on the South Santiam, 97 percent on the McKenzie, 102 percent on the Middle Fork of the Willamette and 109 percent on Row River, tributary of the Coast Fork.

Flow of the main Willamette River at Salem is forecast at 5,635,000 acre feet or 101 percent average for the April through September period.

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WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Calapooya	Average	Average
Clackamas	Average	Average
McKenzie	Average	Average
Molalla	Average	Average
Santiam, North	Average	Average
Santiam, South	Average	Average
Willamette, Coast Fork	Average	Average
Willamette, Middle Fork	Average	Average

RESERVOIR STORAGE (1,000 Ac. Ft.) April 1, 1966

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Cottage Grove	30.0*	15.8	11.9	18.3
Cougar	155.2*	62.6	52.0	- -
Detroit	299.9*	154.3	162.4	173.5[m]
Dorena	70.5*	35.1	24.3	38.7[m]
Fall Creek	115.0*	73.7	- -	- -
Fern Ridge	94.2*	75.7	48.2	67.1
Hills Creek	200.0*	100.2	102.4	- -
Lookout Point	337.2*	109.9	137.6	183.0[m]
Timothy Lake	61.7	60.3	61.7	46.2[m]

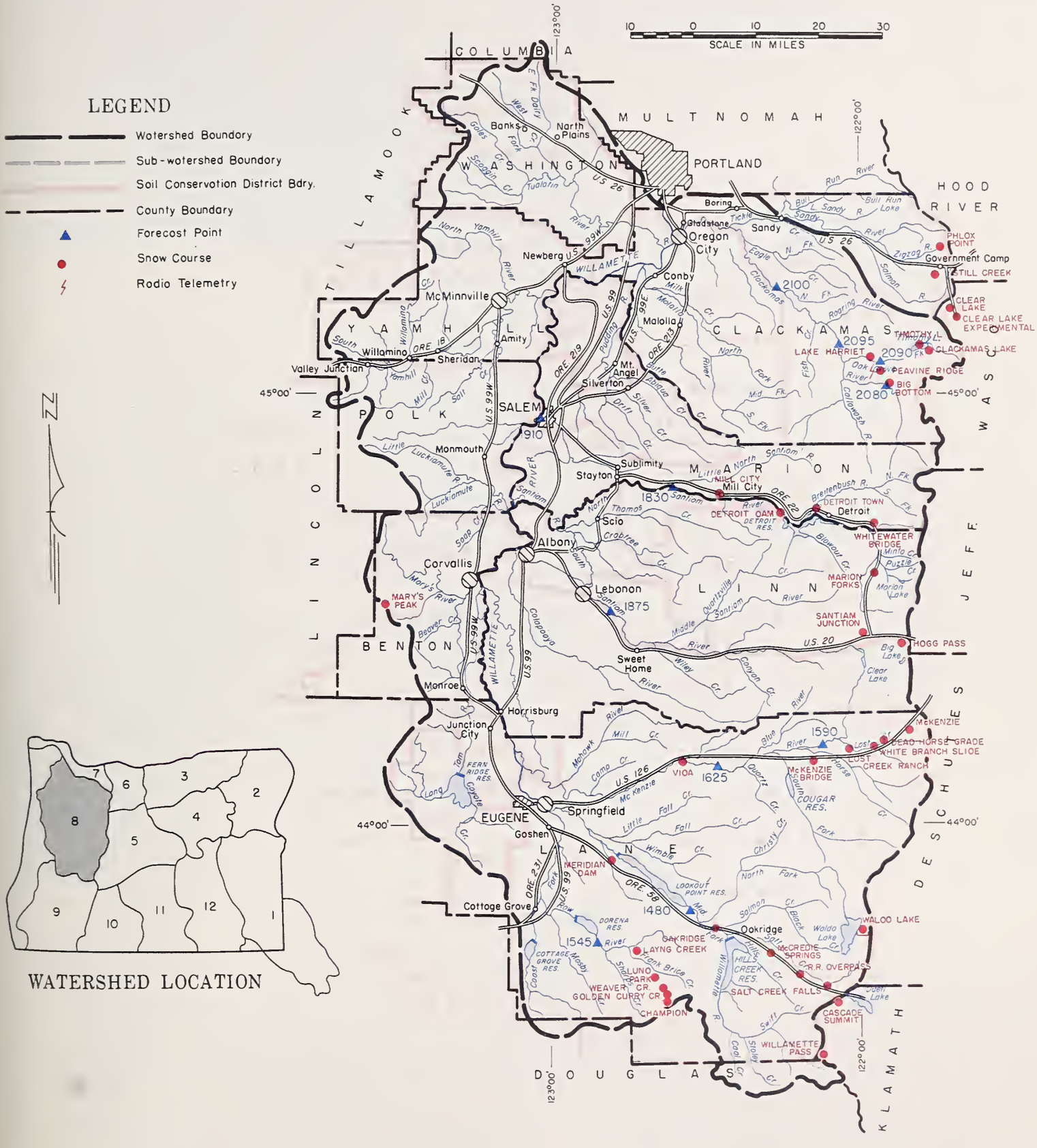
*Multiple purpose reservoir--space reserved primarily for flood control.

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1966

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
2080	Clackamas at Big Bottom	166	April-July	150	111
		197	April-Sept.	184	107
2100	Clackamas at Estacada	855	April-July	770	111
		955	April-Sept.	890	107
2095	Clackamas above Three Lynx	625	April-July	584	107
		722	April-Sept.	683	106
1590	McKenzie at McKenzie Bridge	495	April-July	502	99
		645	April-Sept.	658	98
1625	McKenzie near Vida	1110	April-July	1144	97
		1340	April-Sept.	1392	96
2090	Oak Grove Fork above Power Intake	160	April-July	147	109
		200	April-Sept.	190	105
1545	Row near Dorena	118	April-July	108	109
		122	April-Sept.	112	109
1830	Santiam, North at Mehama[d]	890	April-July	884	101
		990	April-Sept.	991	100
1875	Santiam, South at Waterloo	640	April-July	637	100
		670	April-Sept.	675	99
1480	Willamette, Mid. Fk. blw. N. Fk. nr. Oakridge[d]	890	April-July	863	103
		985	April-Sept.	968	102
1910	Willamette at Salem[d]	5055	April-July	5040	100
		5635	April-Sept.	5566	101

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WILLAMETTE WATERSHEDS



SNOW

SNOW COURSE NAME	ELEVATION	CURRENT INFORMATION: DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	PAST RECORD: WATER CONTENT (Inches) LAST YEAR	1948-62 AVERAGE
Big Bottom	2118	3/31	9	3.8	0.0	6.4[h]
Cascade Summit	4880	3/28	96	40.8	32.5	36.2
Champion	4500	3/31	102	49.2	28.2	33.8
Clackamas Lake	3400	3/29	46	19.0	11.5	15.7
Clear Lake	3500	3/29	41	17.2	11.0	14.5
Clear Lake (Experimental)	3500	3/29	60	24.9	18.5	- -
Dead Horse Grade	3800	3/38	65	27.9	19.1	23.3[h]
Detroit Town	1610	3/30	0	0.0	0.0	0.0[h]
Detroit Dam	1580	3/30	0	0.0	0.0	0.0[h]
Golden Curry Creek	3136	Snow destroyed--construction				
Hogg Pass	4755	3/30	124	54.4	43.4	49.7
Lake Harriet	2045	Not surveyed				
Layng Creek	1200	3/31	0	0.0	0.0	0.0[m]
Lost Creek Ranch	1956	3/28	14	5.3	0.0	1.1[h]
Lund Park	1740	3/31	0	0.0	0.0	0.0[m]
Marion Forks	2730	3/30	54	23.2	9.6	16.6
Marys Peak	3620	4/3	65	28.9	6.6	15.4
McCredie Springs	2120	3/28	0	0.0	0.0	0.0[h]
McKenzie	4800	3/28	123	51.2	46.4	51.3
McKenzie Bridge	1372	3/28	0	0.0	0.0	0.0[m]
Meridian Dam	750	3/28	0	0.0	0.0	0.0[h]
Mill City	826	3/30	0	0.0	0.0	0.0[m]
Oakridge	1310	3/28	0	0.0	0.0	0.0[h]
Peavine Ridge	3500	3/31	71	29.2	17.0	22.9
Phlox Point	5600	3/28	156	68.4	59.7	70.4
Railroad Overpass	2750	3/28	0	0.0	0.0	2.4[h]
Salt Creek Falls	4000	3/28	66	28.1	19.3	20.1[h]
Santiam Junction	3990	3/30	81	35.8	15.2	28.5
Still Creek	3700	3/28	79	34.1	25.1	29.3
Timothy Lake	3295	Not surveyed				
Vida	800	3/28	0	0.0	0.0	0.0[h]
Waldo Lake	5500	3/29	84	33.1	32.6	34.5
Weaver Creek	2440	3/31	0	0.0	0.0	2.1[h]
White Branch Slide	2800	3/28	36	14.5	T	5.6[h]
Whitewater Bridge	2175	3/30	11	4.6	0.0	4.8[h]
Willamette Pass	5600	3/30	110	45.6	41.5	46.3[h]
RADIO REPORTS BY AUTOMATIC-SNOW-MEASURING STATIONS						
			Time			
Peavine Ridge	3500	4/1	8:03 a.m.	25.4	- -	- -
Phlox Point	5600	4/1	7:38 a.m.	62.0	- -	- -

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
ROGUE, UMPQUA, WATERSHEDS
OREGON

as of

APRIL 1, 1966

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

The outlook for spring and summer water supplies in the Umpqua and Rogue basins continues exceptionally good with water in mountain snowpacks above the usual April first amounts and good water reserves in the reservoirs.

SNOW COVER

Water content of the mountain snowpack is 15 percent above the 15-year average (1948-62) on the Umpqua and 12 percent above on the Rogue. Snow in the Siskiyou Mountains, headwaters of the Applegate and Illinois Rivers, is heavy and reached a new maximum on the Althouse and Page Mountain snow courses.

SOIL MOISTURE

Moisture in the top four feet of the soil mantle under the snowpack is about average but will increase to capacity as snow melts.

RESERVOIR STORAGE

Stored water supplies in Talent Irrigation District reservoirs are 109 percent average and total 90,600 acre feet compared with 113,300 acre feet last year. This is a good water supply.

Medford Irrigation District reservoirs now contain 18,300 acre feet, 120 percent average, compared with 21,200 acre feet last year. This is a satisfactory water supply.

STREAMFLOW

Forecasts for spring and summer streamflow in the Umpqua and Rogue basins indicate average or better than average flows can be expected.

The Umpqua, below Lemolo Reservoir, is forecast at 190,000 acre feet or 102 percent of the 15-year average (1948-62). Clearwater River below Trap Creek is forecast at 80,000 acre feet or 106 percent average.

Flow of the Rogue River above Prospect is forecast at 310,000 acre feet or 105 percent average, April through September. The Rogue below South Fork is forecast at 775,000 acre feet or 103 percent average. At Raygold, the Rogue is forecast at 1,020,000 acre feet or 102 percent average.

The Applegate near Copper is forecast at 190,000 acre feet or 134 percent average and the Illinois River at Kerby is estimated to flow 295,000 acre feet or 139 percent of the 1948-62 average.

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WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Althouse Creek	Excellent	Excellent
Applegate River, Big	Excellent	Excellent
Applegate River, Little	Excellent	Average
Ashland Creek	Excellent	Average
Butte Creek, Little	Average	Average
Butte Creek, Big	Average	Average
Cow Creek	Excellent	Average
Deer Creek	Excellent	Average
Elk Creek	Excellent	Average
Emigrant Creek (abv. Res.)	Excellent	Average
Evans Creek	Excellent	Average
Gold Hill Irrigation Dist.	Average	Average
Grants Pass Irrig. Dist.	Average	Average
Grave Creek	Excellent	Average
Illinois River, East Fork	Excellent	Excellent
Illinois River, West Fork	Excellent	Excellent
Jump-off-Joe Creek	Excellent	Average
Neil Creek	Excellent	Average
Red Blanket Creek	Excellent	Average
Rogue River	Average	Average
Sucker Creek	Excellent	Excellent
Table Rock Irrig. Dist.	Average	Average
Thompson Creek	Excellent	Excellent
Wagner Creek	Excellent	Average
Williams Creek	Excellent	Excellent

RESERVOIR STORAGE (1,000 Ac. Ft.) April 1, 1966

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Emigrant Gap	39.0	37.4	36.3	33.8*
Fish Lake	7.8	7.2	7.9	5.7
Fourmile Lake	16.1	11.1	13.3	9.5
Howard Prairie	60.0	41.4	60.6	- -
Hyatt Prairie	16.1	11.8	16.4	9.4

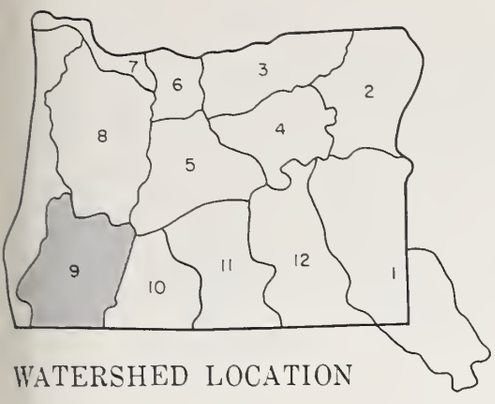
*Average for years of record after reconstruction.

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1966

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
3620	Applegate near Copper	190	April-Sept.	142	134
3145	Clearwater above Trap Creek[d]	80	April-Sept.	75	106
5045	Fourmile Lake net Inflow[d]	6.6	April-Sept.	6.6	100
5140	Hyatt Reservoir net Inflow[d]	6.5	April-Sept.	6.4	102
3770	Illinois River at Kerby	288	April-July	206	140
		295	April-Sept.	212	139
3425	Little Butte, N. Fk. at Fish Lk. nr. Lake Cr.[d]	16.5	April-Sept.	16.0	103
3415	Little Butte, So. Fk. nr. Lake Creek	42	April-July	38	110
	Note: Minimum flow will drop to 100 c.f.s. by June 8.				
3280	Rogue above Prospect	310	April-July	295	105
		370	April-Sept.	355	104
3320	Rogue, South Fork near Prospect[d]	72	April-July	70	103
		84	April-Sept.	82	102
3350	Rogue River below South Fork	635	April-July	611	104
		775	April-Sept.	754	103
3590	Rogue at Raygold near Central Point	870	April-July	837	104
		1020	April-Sept.	1001	102
3615	Rogue at Grants Pass	1010	April-Sept.	993	102
3135	Umpqua, No. blw. Lemolo Res. nr. Toketee Falls[d]	190	April-Sept.	186	102

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

ROGUE, UMPQUA WATERSHEDS



WATERSHED LOCATION

LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry
- County Boundary
- Forecast Point
- Snow Course
- Precipitation Gage

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
					WATER CONTENT (Inches)	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	LAST YEAR	1948-62 AVERAGE
Althouse	4530	3/29	60	28.1	1.8	7.2
Annie Spring	6018	3/29	121	53.3	51.8	49.7
Beaver Dam Creek	5100	3/30	36	16.1	T	- -
Big Red Mountain	6500	3/29	90	39.3	27.8	32.6
Billie Creek Divide	5300	3/31	46	19.4	17.6	25.4
Caliban	6500	3/28	99	35.6	- -	- -
Champion	4500	3/31	102	49.2	28.2	33.8
Cold Springs Camp	6100	3/24	101	36.6	38.0	- -
Deadwood Junction	4600	3/30	27	11.8	0.0	- -
Diamond Crater Summit	5800	3/28	97	40.0	42.5	- -
Diamond Lake	5315	3/28	72	29.1	21.8	26.6
Eden Valley Summit	2390	b				
Fish Lake	4865	3/29	41	14.0	0.0	16.9[h]
Fourmile Lake	6000	3/29	65	25.6	19.4	31.3[h]
Grayback Peak	6000	3/31	91	42.3	24.4	30.5
Howard Prairie	4500	3/30	26	10.9	0.0	- -
Hyatt Prairie Reservoir	4900	3/30	23	9.9	T	9.6[h]
King Mountain #1	4800	b				
King Mountain #2	3646	b				
King Mountain #3	2550	b				
King Mountain #4	1779	b				
Little Red Mountain	6500	3/30	74	35.1	22.7	26.3
Mt. Ashland Switchback	6400	3/28	102	40.7	- -	- -
North Umpqua	4215	3/25	50	19.8	8.9	16.4
Page Mountain	4045	3/29	33	15.0	0.0	4.9[h]
Park Headquarters	6450	3/30	142	62.2	76.7	62.1
Red Butte #1	4560	3/25	92	39.3	1.2	- -
Red Butte #2	4000	3/25	61	28.2	1.2	- -
Red Butte #3	3500	3/25	44	20.0	0.0	- -
Red Butte #4	3000	3/25	27	14.2	0.0	- -
Red Butte #5	2500	3/25	0	0.0	0.0	- -
Red Butte #6	2000	3/25	0	0.0	0.0	- -
Seven Lakes #1	6800	3/30	142	60.1	66.8	64.3[h]
Seven Lakes #2	6200	3/29	114	44.6	44.9	47.2
Silver Burn	3720	3/29	49	21.1	5.9	13.9
Siskiyou Summit	4630	3/29	12	6.4	T	3.6
Ski Bowl Road	6000	3/28	92	36.3	- -	- -
South Fork Canal	3500	3/30	T	T	0.0	1.2
Trap Creek	3800	3/25	47	20.0	5.8	11.8[h]
Whaleback	5140	4/1	98	43.4	31.1	38.6
Windigo Pass	5800	3/31	99	40.3	50.1	48.7

"The Conservation of Water begins with the Snow Survey"

Area 10

WATER SUPPLY OUTLOOK
KLAMATH WATERSHEDS
OREGON

as of

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

The outlook for spring and summer water supplies in Klamath Basin is very near average for water users having access to stored water. Stored water is excellent this year although forecasted streamflow is between 70 and 80 percent average.

SNOW COVER

Water content of the mountain snowpack is 98 percent of the April first average and 115 percent of last year on this date.

SOIL MOISTURE

Moisture in the top four feet of the soil mantle under the snowpack is 87 percent of capacity compared with 90 percent last year.

RESERVOIR STORAGE

Stored water supplies are excellent and vary from about average to well above average for this date. Gerber Reservoir holds 68,200 acre feet compared with 80,700 acre feet last year and an average storage of 49,400 acre feet. Clear Lake Reservoir holds 241,500 acre feet compared with 290,000 acre feet last year and an average of 235,000 acre feet.

Upper Klamath Lake held only 328,000 acre feet one month ago compared with 460,200 acre feet now and 391,000 acre feet a year ago. The average April 1 storage in this reservoir is 461,800 acre feet.

STREAMFLOW

Forecasts of spring and summer streamflow in Klamath Basin vary from 80 percent of the 15-year average (1948-62) inflow to Upper Klamath Lake and 76 percent average flow for Sprague River near Chiloquin to 69 and 73 percent average inflow, respectively, to Gerber and Clear Lake reservoirs.

Net flow into Upper Klamath Lake* during March was 89 percent average and the total inflow since October 1, 1965 has been 87 percent average.

* Preliminary data from Pacific Power and Light Company, Portland, Oregon.

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WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Ft. Klamath Valley	Average	Average
Lost River (Clear Lake)	Average	Average
Lost River (Gerber)	Average	Average
Lost River (Willow Res.)	Average	Average
Sprague River	Average	Average
Upper Klamath Lake	Average	Average
Williamson River	Average	Average

RESERVOIR STORAGE (1,000 Ac. Ft.) April 1, 1966

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Clear Lake	440.2	241.5	289.9	235.5
Gerber	94.0	68.2	80.7	49.4
Upper Klamath Lake	584.0	460.2	391.0	461.8

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1966

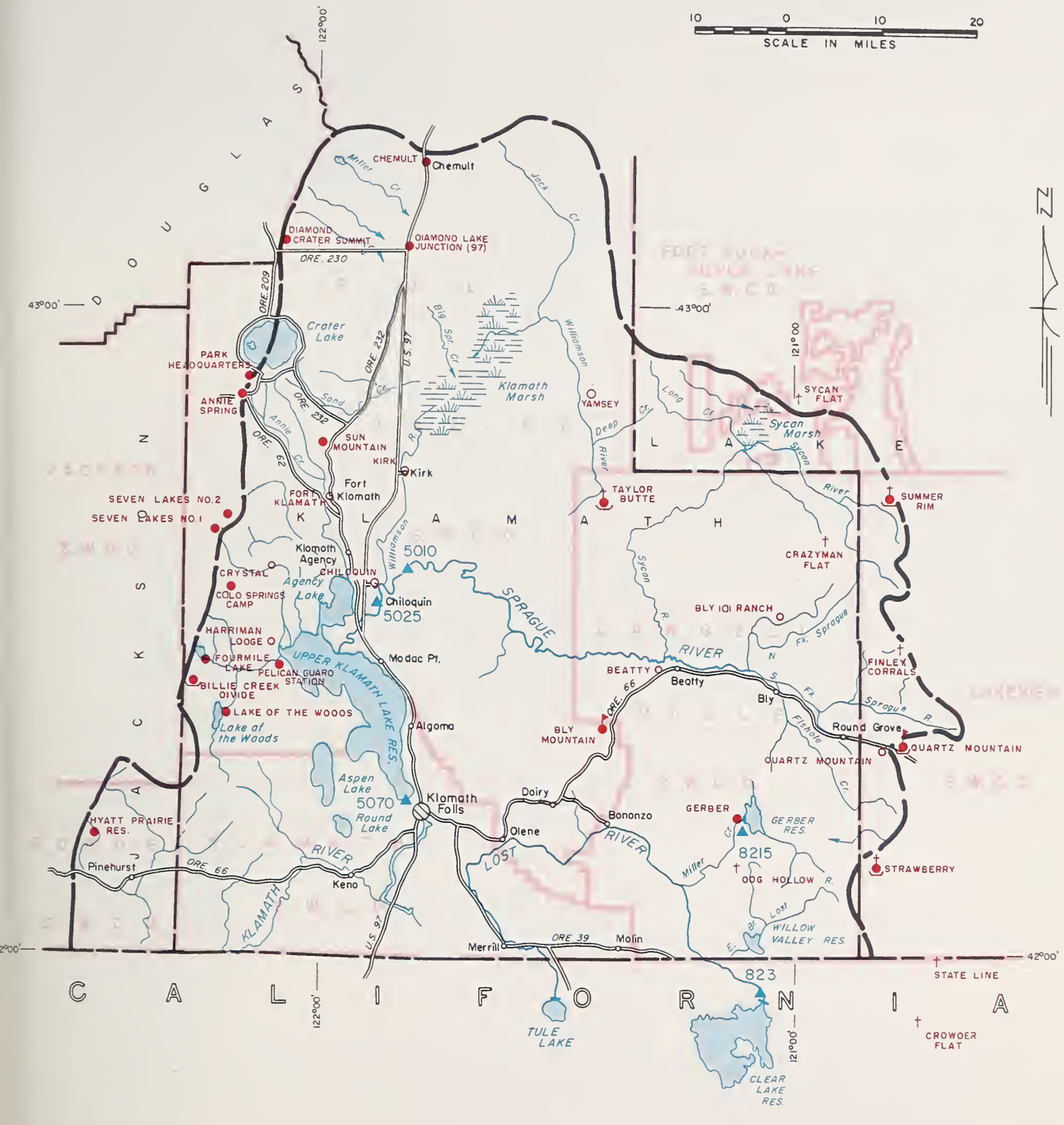
FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
823	Clear Lake Reservoir Inflow[k]	32	April-June	44	73
		35	April-Sept.	48	73
8215	Gerber Reservoir Inflow[k]	15.5	April-June	22	70
		15.8	April-Sept.	23	69
5010	Sprague near Chiloquin	197	April-July	256	77
		220	April-Sept.	289	76
5070	Upper Klamath Lake net Inflow[k]	425	April-July	527	81
		510	April-Sept.	639	80
5025	Williamson below Sprague River	340	April-July	413	82
		400	April-Sept.	490	82

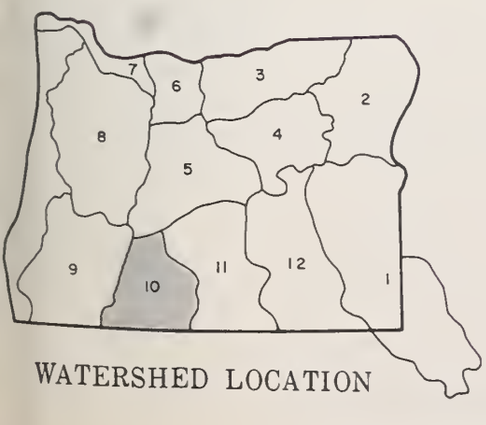
SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Bly Mountain	5090	42	14.0	4-1-66	12.2	12.6	10.5

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

KLAMATH WATERSHEDS





WATERSHED LOCATION

LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- Forecast Point
- Snow Course
- Aerial Snow Depth Gage
- COPCO Snow Station
- Soil Moisture Station
- Precipitation Gage

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
					WATER CONTENT (Inches)	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	LAST YEAR	1948-62 AVERAGE
Annie Spring	6018	3/29	121	53.3	51.8	49.7
Beatty (PP&L)	4400	b				
Billie Creek Divide	5300	3/31	46	19.4	17.6	25.4
Bly Mountain	5090	3/29	14	6.3	0.0	3.9
Bly 101 Ranch (PP&L)	4800	b				
Chemult	4760	3/29	28	12.1	4.3	10.5
Chiloquin (PP&L)	4187	b				
Cold Springs Camp	6100	3/24	101	36.6	38.0	- -
Crazyman Flat[e]	6100	3/25	35	13.6	5.0	10.3[m]
Crowder Flat[e] (Calif.)	5200	3/25	2	0.3	0.0	0.6[m]
Crystal (PP&L)	4200	3/31	20	8.5	0.0	7.2
Diamond-Crater Summit	5800	3/28	97	40.0	42.5	- -
Diamond Lake Junction (97)	4600	3/28	17	7.1	1.1	- -
Dog Hollow[e]	4900	3/25	0	0.0	0.0	0.0[m]
Finley Corrals[e]	6000	3/25	37	14.4	11.3	16.9[m]
Fort Klamath (PP&L)	4150	3/30	5	1.9	0.0	1.2
Fourmile Lake	6000	3/29	65	25.6	19.4	31.3[h]
Gerber	4850	3/31	0	0.0	0.0	0.8[h]
Harriman (PP&L)	4200	b				
Hyatt Prairie Reservoir	4900	3/30	23	9.9	T	9.6[h]
Kirk (PP&L)	4533	b				
Lake of the Woods	4960	3/26	36	13.8	7.4	12.4
Park Headquarters	6450	3/30	142	62.2	76.7	62.1
Pelican Guard Station	4150	3/31	0	0.0	0.0	- -
Quartz Mountain	5320	3/29	15	6.3	0.0	5.7
Quartz Mountain (PP&L)	5504	3/29	20	8.0	2.8	6.1
Seven Lakes #1	6800	3/30	142	60.1	66.8	64.3[h]
Seven Lakes #2	6200	3/29	114	44.6	44.9	47.2
State Line[e] (Calif.)	5750	3/25	24	9.4	2.1	9.9[m]
Strawberry	5760	3/26	26	9.3	- -	8.0
Summer Rim	7200	3/30	44	16.4	21.3	19.6
Sun Mountain	5350	3/25	75	25.9	23.7	28.6[m]
Sycan Flat[e]	5500	3/25	20	7.8	0.0	4.6[h]
Taylor Butte	5100	3/30	4	2.0	0.2	4.5[h]
Yamsey (PP&L)	4600	b				

Area 11

WATER SUPPLY OUTLOOK
LAKE COUNTY, GOOSE LAKE WATERSHEDS
OREGON

as of

APRIL 1, 1966

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

The outlook for spring and summer water supplies in Lake County has dimmed to only "fair" except for lands served from stored water supplies which are average. Soil moisture is still below average and snowpacks failed to reach average accumulation.

SNOW COVER

Water content of the mountain snowpack is 86 percent of the 15-year average (1948-62) and is much greater than usual in the elevations between 5,000 and 6,000 feet. This unusual distribution will assist volume flows at median elevations.

SOIL MOISTURE

Moisture in the top four feet of the soil mantle under the snowpack is only 65 percent of capacity compared with 80 percent last year. These soils will continue to absorb moisture from snowmelt runoff.

RESERVOIR STORAGE

Stored water in Cottonwood and Drews Valley Reservoirs totals 55,000 acre feet or 111 percent of average although short of the 64,800 acre feet on hand a year ago. This is an adequate supply.

STREAMFLOW

Forecasts of spring and summer streamflow, April through June, range from 71 percent of the 15-year average (1948-62) for Drews Reservoir inflow and 68 percent average for flows of Chewaucan River and Deep Creek.

Flows of Honey Creek and Twentymile Creek are forecast at 54 and 48 percent average, respectively, and will produce highly limited amounts of water.

Except where stored water supplies are available, there will likely be only one full irrigation this season. Timely rainfall could improve this dim outlook.

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WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Chewaucan	Average	Fair
Crooked Creek	Fair	Fair
Deep Creek	Average	Fair
Dry Creek	Average	Fair
East Side Goose Lake	Fair	Fair
Guano Lake	Fair	Poor
Honey Creek	Fair	Poor
Lakeview Water Users Assn.	Average	Average
Rock Creek (Hart Mtn.)	Fair	Poor
Silver-Buck Creeks	Average	Fair
Summer Lake	Average	Fair
Thomas Creek	Average	Fair
Twentymile Creek	Fair	Poor
Warner Lakes	Fair	Poor

RESERVOIR STORAGE (1,000 Ac. Ft.) April 1, 1966

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE
Cottonwood	8.7	2.1	8.0	5.5*
Drews	63.0	52.9	56.8	44.1

*Average for years of record after reconstruction.

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1966

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
3840	Chewaucan near Paisley	54	April-June	79	68
		60	April-Sept.	88	68
3715	Deep above Adel	46	April-June	68	68
		48	April-Sept.	72	67
3385	Drews Reservoir net Inflow	25	April-July	35	71
		25	April-Sept.	35	71
3785	Honey near Plush	8.5	April-June	15.6	54
		8.7	April-Sept.	16.1	54
3660	Twentymile near Adel	10.0	April-June	21	48
		10.6	April-Sept.	22	48

SOIL MOISTURE

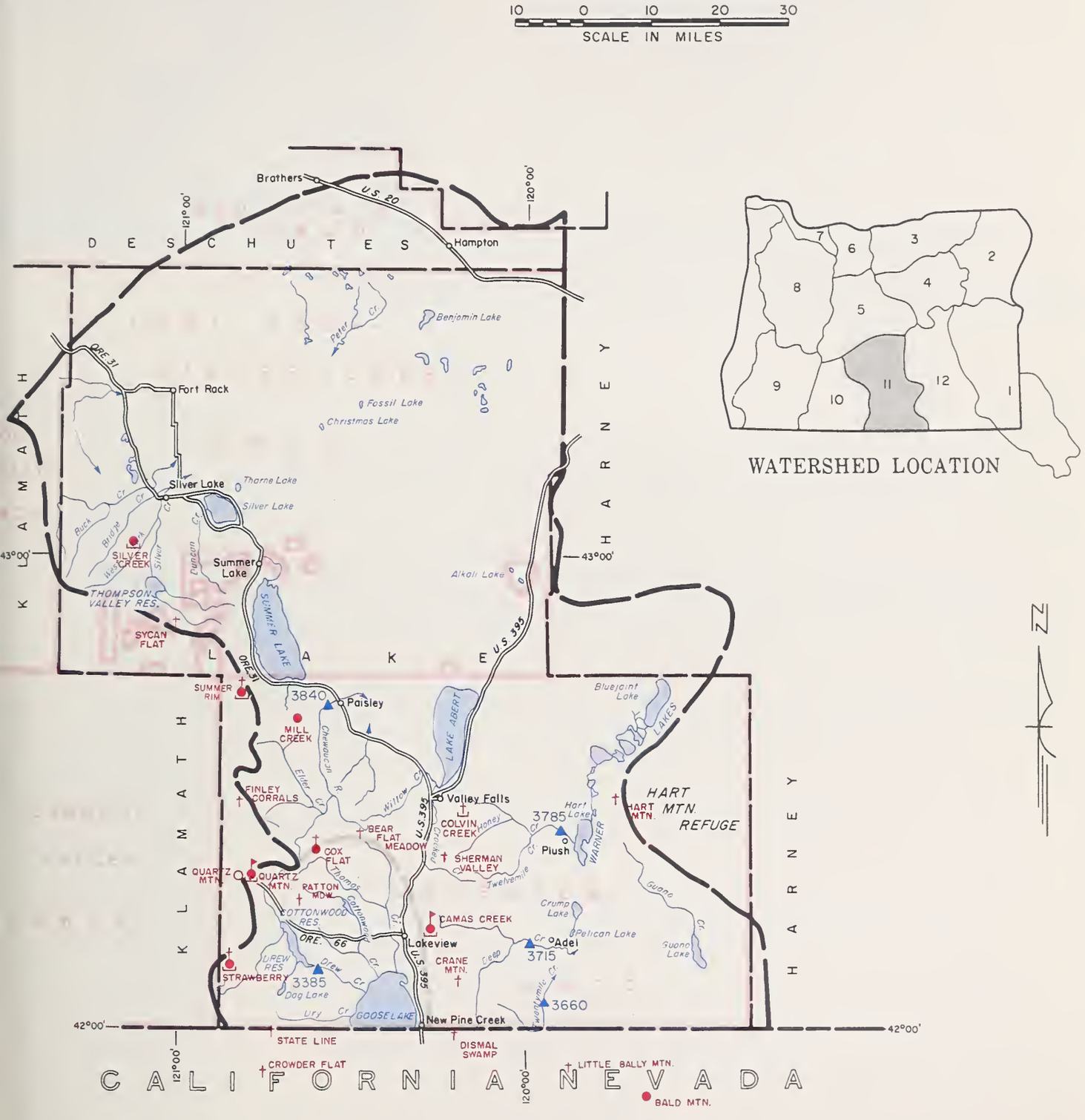
STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Camas Creek	5720	42	14.5	3-31-66	12.0	13.2	12.7
Quartz Mountain	5320	48	15.3	3-29-66	7.5	10.6	8.4

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches) LAST YEAR	WATER CONTENT (Inches) 1948-62 AVERAGE
Bald Mountain (Nev.)	6720	3/31	1	0.3	0.4	3.8
Bear Flat Meadow[e]	5900	3/25	33	12.9	8.4	12.6[m]
Camas Creek	5720	3/31	19	7.8	6.3	12.0
Colvin Creek[e]	6550	3/25	21	8.2	- -	- -
Cox Flat	5750	3/25	24	9.4	6.7	6.4[m]
Crane Mountain[e]	6020	3/25	0	0.0	0.0	5.2[m]
Crowder Flat[e] (Calif.)	5200	3/25	2	0.3	0.0	0.6[m]
Dismal Swamp[e] (Calif.)	7000	3/25	38	13.7	18.9	20.6[m]
Finley Corrals[e]	6000	3/25	37	14.4	11.3	16.9[m]
Hart Mountain[e]	6350	3/25	2	0.8	0.4	1.2[m]
Little Bally Mountain[e] (Nev.)	6600	3/25	5	1.8	0.0	- -
Mill Creek	6200	3/29	17	6.5	8.5	9.7
Patton Meadows[e]	6800	3/25	44	17.2	18.0	- -
Quartz Mountain (PP&L)	5504	3/29	20	8.0	2.8	6.1
Quartz Mountain	5320	3/29	15	6.3	0.0	5.7
Sherman Valley[e]	6600	3/25	32	12.5	10.9	13.4[m]
Silver Creek	4900	4/1	0	0.0	0.0	1.4
State Line[e] (Calif.)	5750	3/25	24	9.4	2.1	9.9[m]
Strawberry	5760	3/26	26	9.3	- -	8.0
Summer Rim	7200	3/30	44	16.4	21.3	19.6
Sycan Flat[e]	5500	3/25	20	7.8	0.0	4.6[m]

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

LAKE COUNTY, GOOSE LAKE WATERSHEDS



WATERSHED LOCATION

LEGEND

- Watershed Boundory
- Sub-watershed Boundory
- Soil Conservation District Bdry
- County Boundory
- ▲ Forecast Point
- ● Snow Course
- † Aerial Snow Depth Gage
- ○ COPCO Snow Station
- ⚑ Soil Moisture Station
- ⌴ Precipitation Gage

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
HARNEY BASIN WATERSHEDS
OREGON

as of

APRIL 1, 1966

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

The outlook for spring and summer water supplies in Harney Basin is very poor with most lands expected to have only one irrigation--in some cases even that irrigation will be short. This picture can be improved only by good rains.

SNOW COVER

Water content of the mountain snowpack on April first was 60 percent of the 15-year average (1948-62) in North Harney and 53 percent average in South Harney. Unusually warm temperatures and winds during the last ten days have melted considerable snow but produced very little runoff.

SOIL MOISTURE

Moisture in the top four feet of soil mantle under the snowpack has been below average and has been absorbing heavy amounts of snowmelt water.

RESERVOIR STORAGE

There has been a disappointingly small inflow into most of the reservoirs of the county--probably due to soils absorbing the snowmelt runoff.

STREAMFLOW

Forecasts for spring and summer streamflow in Harney Basin are all about half the 15-year average (1948-62) flow. The Silvies River is forecast to flow 43,000 acre feet or 46 percent April through June. This will be less than the 48,000 acre feet measured in 1964.

Silver Creek is forecast at 10,800 acre feet or 49 percent average April through July. The flow will be slightly less than the 11,400 acre feet measured in 1964.

Flow of the Blitzen River is forecast at 25,000 acre feet or 48 percent average April through June. This flow would be about half the flow received in 1964 and would be similar to the "short" year in 1959.

Trout Creek is forecast to flow 4,500 acre feet or 61 percent average April through July. This flow is about the same as occurred in 1961.

Report prepared by
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U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

WATER SUPPLY OUTLOOK expressed as "Poor", "Fair" "Average" or "Excellent"

STREAM or AREA	FLOW PERIOD	
	SPRING SEASON	LATE SEASON
Catlow Valley	Fair	Poor
Cow Creek	Fair	Poor
Donner und Blitzen River	Fair	Poor
Mill-Coffeepot Creeks	Fair	Poor
Rattlesnake Creek	Fair	Poor
Silver Creek	Fair	Poor
Silvies River	Fair	Poor
Soldier-Prather Creek	Fair	Poor
Trout Creek	Fair	Poor
Whitehorse Creek	Fair	Poor

RESERVOIR STORAGE (1,000 Ac. Ft.) April 1, 1966

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948-62 AVERAGE

STREAMFLOW FORECASTS[a] (1,000 Ac. Ft.) as of April 1, 1966

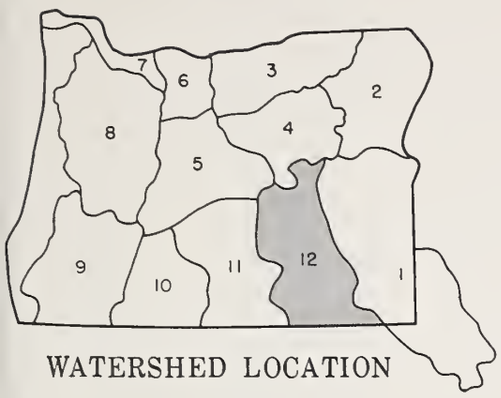
FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	1948-62 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE[i]
NO.	NAME				
3960	Donner und Blitzen near Frenchglen	25	April-June	52	48
		30	April-Sept.	62	48
4030	Silver near Riley	10.8	April-July	22	49
3935	Silvies near Burns	43	April-June	96	46
		45	April-Sept.	99	45
4065	Trout near Denio	4.5	April-July	7.4	61
		5.0	April-Sept.	8.4	60

SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
Blue Mountain Springs	5900	42	16.9	3-31-66	8.8	12.3	7.9
Fish Creek	7900	48	15.0	3-31-66	10.4[f]	- -	9.2
Folly Farm	4450	30	12.5	3-8-66	8.5[f]	12.1	8.3[f]
Silvies	6900	48	16.4	3-31-66	11.6	13.4	10.4
Snow Mountain	6300	48	16.7	3-29-66	12.3	15.9	12.4
Starr Ridge	5150	36	10.6	3-30-66	9.0	10.4	8.5
Stinking Water Summit	4800	48	21.9	4-6-66	21.4[f]	21.9	20.8
Willow-Bald	5000	24	6.6	2-24-66	3.8[f]	6.5	5.4

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1948-62 adjusted average. (i) 1948-62, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

HARNEY BASIN WATERSHEDS



WATERSHED LOCATION

LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- ▲ Forecast Point
- ● Snow Course
- † Aeriol Snow Depth Gage
- ⚑ Soil Moisture Station
- ⊔ Precipitation Gage

Harney Basin Watersheds

SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD	
					WATER CONTENT (Inches)	
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	LAST YEAR	1948-62 AVERAGE
Blue Mountain Springs	5900	3/31	30	10.6	22.2	17.3
Buck Pasture[e]	5700	4/1	0	0.0[j]	0.0	- -
Buckskin Lake[e]	5200	4/1	0	0.0[j]	0.0	- -
Call Meadows[e]	5340	4/1	0	0.0[j]	2.3	- -
Crow Camp[e]	5500	4/1	0	0.0[j]	0.0	- -
Delintment Lake	5600	3/29	16	5.9	6.2	9.0[h]
Denio Creek[e]	6000	4/1	0	0.0[j]	0.0	- -
Disaster Peak (Nev.)	6500	3/30	9	2.4	8.9	11.7[h]
Emigrant Butte	5000	3/29	0	0.0	0.0	2.4[h]
Fish Creek	7900	3/31	47	17.9[j]	35.8	26.9
Hart Mountain[e]	6350	3/25	2	0.8	0.4	1.2[m]
Idlewild Camp	5200	3/28	11	3.5	2.0	5.2
Izee Summit	5293	3/30	17	5.4	8.0	8.8
Lake Creek	5120	4/1	16	6.5	13.5	11.2
Oregon Canyon[e]	6950	4/1	T	T[j]	1.2	- -
Rock Spring	5100	3/28	13	4.4	3.5	5.2
Silvies	6900	3/31	18	7.5[j]	14.0	14.0
Snow Mountain	6300	3/29	29	10.2	17.2	14.7
Starr Ridge	5150	3/30	4	1.3	7.5	5.3
Stinking Water	4800	Not surveyed				
Trout Creek[e]	7800	4/1	10	3.5[j]	8.8	- -
"V" Lake[e]	6600	4/1	T	T[j]	2.4	- -

"The Conservation of Water begins with the Snow Survey"

NUMBER	NAME	LOCATION SEC.	TWP.	RGE.	ELEV.

OWYHEE, MALHEUR WATERSHEDS (1)

Owyhee River

16J13	Red Canyon (Ida)	32	11S	4W	6500
16M4MF	Rodeo Flat (Nev)	36	43N	53E	6800
15K3A	Jo Creek (Nev)	6	44N	58E	7100
16F3 AP	Silver City (Ida)	6	5S	3W	6400
18J1MA	Silvies	35	23S	29E	6000
16J1	South Mountain No.2 (Ida)	10	8S	5W	6340
16F6a	Succor Creek (Ida)	25	3S	5W	6100
15M2F	Taylor Canyon (Nev)	35	39N	53E	6200
15J5	Trenevan Ranch (Nev)	9	39N	55E	6700
16G2MA	Triangle (Ida)	25	7S	3W	5150
18J5a	Trout Creek	10	23S	38E	7800
18J7a	WYW Lake	31	35½S	32½E	6600
16G12a	Vaught Ranch (Ida)	10	11S	1E	5950
16G13a	War Eagle (Ida)	20	5S	3W	7700

Malheur River

18E12	Barney Creek	16	14S	36E	5950
18E16MF	Blue Mountain Spring	21	15S	35E	5900
18F6a	Buck Pasture	10	17S	37E	5300
18E21a	Bully Creek	29	20S	33E	5340
18F7a	Gall Meadows	10	19S	39E	4320
17F24	Cottonwood-Indian	24	16S	34E	5375
18E19M	Crane Prairie		Unsurveyed		
18F8a	Crow Camp	20	14S	38E	4600
18E20	Eldorado Pass	32	16S	36E	4750
18E26a	Flag Prairie	10	16S	33½E	5120
18E18	Lake Creek	13	16S	33½E	5100
18E22a	Logan Valley	23	18S	32E	5100
18F1	Rock Spring	33	21S	34E	4800
18F1MF	Stinking Water				

NUMBER	NAME	LOCATION SEC.	TWP.	RGE.	ELEV.

BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS (2)

Burnt River

18E32n*	S. Fk. Willow Divide	2	16S	37E	5500
13E14	Barney Creek	16	14S	36E	5950
18E13M	Blue Mountain Summit	6	12S	36E	5098
17E1M	Dooley Mountain	32	11S	40E	5430
18E20	Eldorado Pass	20	14S	38E	4600
18E8	Gold Center	21	9S	36E	5340
18E9	Tipton	34	10S	35½E	5100

Powder River

18E1	Anthony Lake	18	7S	37E	7125
18E5	Bourne	33	8S	37E	5800
17E1M	Dooley Mountain	32	11S	40E	5430
18E3	Ellertson Meadows	18	8S	38E	5400
18E8	Gold Center	21	9S	36E	5340
18E6	Goodrich Lake	4	9S	38E	6775
18E29	Intake House	5	8S	38E	4930
17D12m	Ladd Summit	5	5S	39E	3730
18E23	Little Alps	10	7S	37E	6200
18E28	Power Plant	33	7S	38E	3990
18E30	Little Antone	1	7S	37E	5000
18D10	Summit Springs	9	6S	37E	6000
17D7	Taylor Green	3	6S	42E	5740

Pine Creek

17D8	Schneider Meadows	35	6S	45E	5400

Grande Ronde River

17D1	Aneroid Lake No. 1	16	4S	45E	7480
17D2P	Aneroid Lake No. 2	16	4S	45E	7300
18E1	Anthony Lake	18	7S	37E	7125
17D10a	Bald Mountain	14	4S	41E	6700
18D9	Beaver Reservoir	8	5S	37E	5340
18D8	County Line	28	4S	34E	4800
18D6	Lucky Strike	28	3S	32E	5050
18D5	Meacham	24 & 25	1S	35E	4300
17D13a	Mirror Lake	34	4S	44E	8200
17D6M	Moss Spring	28	3S	41E	5850
18D7	Schoolmarm	28	4S	34E	4775
17D11a	Standley	28	2S	42E	7400
17D7	Taylor Green	3	6S	42E	5740
18D3M	Tollgate	31	4N	38E	5070
17D15 a	TV Ridge	12	2S	43E	7000

Imnaha River

17D1	Aneroid Lake No. 1	16	4S	45E	7480
17D2P	Aneroid Lake No. 2	16	4S	45E	7000
17D14 a	Big Sheep	33	1S	46E	6200

UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS (3)

Umotillo River

19D2	Arbuckle Mountain	33	4S	29E	5400
18D14m	Athena-Weston Summit	21	4N	35E	1700
18D12M	Battle Mountain Summit	29	3N	31E	4340
18D4M	Emigrant Springs	29	1N	35E	3925
18D6	Lucky Strike	28	3S	32E	5050
18D5	Meacham	24 & 25	1S	35E	4300
18D3M	Tollgate	32	4N	38E	5070
18D13	Walla Walla Diversion	22	6N	38E	2400

Wallo Wallo River

18D16	Blue Mountain Camp	35	4N	37E	4300
18D3M	Tollgate	32	4N	38E	5070
18D17	Weston Mountain	25	4N	35E	2700

Willow Creek

19D2	Arbuckle Mountain	33	4S	29E	5400
18E1	Anthony Lake	18	7S	37E	7125

UPPER JOHN DAY WATERSHEDS (4)

Upper John Day River

19D2	Arbuckle Mountain	33	4S	29E	5400
18D12M	Battle Mountain Summit	29	3S	31E	4340
19E2M	Beech Creek Summit	4	12S	30E	4800
18E16MF	Blue Mountain Spring	21	15S	35E	5900
18E13M	Blue Mountain Summit	6	12S	36E	5098
19E3MF	Derr	14	13S	23E	5670
18E27a	East Fork Canyon	15	13S	32E	5700
18E8	Gold Center	21	9S	36E	5340
18E24a	Indian Cr. Butte	5	15S	33E	6550
19E9P	Izee Summit	28	16S	29E	5293
18D6	Lucky Strike	28	3S	32E	5050
20E1MF	Marks Creek	25	12S	19E	4540
20E2	Ochoco Meadows	21	13S	20E	5200
18E7	Olive Lake	14	9S	34E	6000
18D7	Schoolmarm	28	4S	34E	4775
19F1M	Snow Mountain	1	19S	26E	6300
19E7M	Starr Ridge	20	15S	31E	5150
18E9	Tipton	34	10S	35½E	5100
18E25MP	Williams Ranch	20	15S	32E	4500

UPPER DESCHUTES, CROOKED WATERSHEDS (5)

Upper Deschutes River

21E11	Black Pine Spring	14	16S	9E	4600
21F8	Caldwell Ranch	30	21S	8E	4400
22F3	Cascade Summit	7	23S	6E	4880
21F7	Charlton Lake	23	21S	6E	5750
21F11	Chemult	21	27S	8E	4760
21F20P	Deer Creek	25	20S	7E	4554
21F14	Fire Road	36	21S	11E	5050
21E6	Hogg Pass	24	13S	7½E	4755
21F4	Hungry Flat	30	18S	11E	4400
21F6	Irish-Taylor	25	20S	6E	5500
21F17	Mowich	29	21S	5E	4700
21F10	New Crescent Lake	11	24S	6E	4800
21F19	New Dutchman Flat #2	21	18S	9E	6400
21F13	Paulina Lake	34	21S	12E	6330
21F15	Paulina Prairie	28	21S	11E	4285
21F3	Tangent	28	18S	10E	5400
21E15	Three Creeks Butte	27	16S	9E	5200
21E13	Three Creek Meadows	34	16S	9E	5650
22F2	Waldo Lake	15	21S	6E	5500
22F14	Willamette Pass	33	24S	5½E	5600
22F15	Windigo Pass	32	25S	6E	5800

Crooked River

19E3MP	Derr	14	13S	23E	5670
20E1MP	Marks Creek	25	12S	19E	4540
20E2	Ochoco Meadows	21	13S	20E	5200
19F1M	Snow Mountain	1	19S	26E	6300
19E4	Tamarack	8	15S	25E	4800

HOOD, MILE CREEKS LOWER DESCHUTES WATERSHEDS (6)

Hood River

21D5	Brooks Meadows	2	2S	10E	4300
21D25M	Cooper Spur	6	2S	10E	3490
21D1	Greenpoint Reservoir	28	2N	9E	3400
21D20	Knebal Springs	31	1S	11E	3850
21D23	Parkdale	6	1S	10E	1779
21D8	Phlox Point	6	3S	9E	5600
21D4	Red Hill	20	1S	9E	4400
21D9	Still Creek	25	3S	8½E	3700
21D7	Tilly Jane	28	1S	11E	3350
21D21	Ulrich Ranch Junction	1	3S	9E	5100
21D30	Umbrella Falls	20	1S	10E	2530
21D24	Upper Valley	28	1S	9E	3253
21D28	Switchback				

Mile Creeks - Mosier Creek

21D6	Brooks Meadows	2	2S	10E	4300
21D20	Knebal Springs	31	1S	11E	3850
21D21	Ulrich Ranch Junction	28	1S	11E	3350

Lower Deschutes River

21D12	Clear Lake	29	4S	9E	3500
21D22	Clear Lake Experimental	29	4S	9E	3500
21E6	Hogg Pass	24	13S	7½E	4755

LOWER COLUMBIA WATERSHEDS (7)

Sandy River

21D8	Phlox Point	6	3S	9E	5600
21D9	Still Creek	25	3S	8½E	3700

WILLAMETTE WATERSHEDS (8)

Clackamas River

21D15	Big Bottom	25	6S	7E	2118
21D13	Clackamas Lake	35	5S	8½E	3400
21D12	Clear Lake	29	4S	9E	3500
21D16	Lake Harriet	4	6S	7E	2043
21D14*	Peavine Ridge	14 & 15	6S	7E	3500
21D8	Phlox Point	6	3S	9E	5600
21D9	Still Creek	25	3S	8½E	3700
21D17	Timothy Lake	26	5S	8E	3295

Santiam River

22E1	Detroit (town)	1	10S	5E	1610
22E2	Detroit Dam	7	10S	5E	1580
21E6	Hogg Pass	24	13S	7½E	4755
21E4	Marion Forks	28	11S	7E	2730
22E3	Mill City	29	9S	3E	826
21E5	Santiam Junction	14	13S	7E	3990
21E3	Whitewater Bridge	28	10S	7E	2175

McKenzie River

21E8	Dead Horse Grade	13	16S	7E	3800
22E4	Lost Creek Ranch	24	16S	6E	1956
21E7	McKenzie	35	15S	7½E	4800
22E5	McKenzie Bridge	13	16S	5E	1372
22E6	Vida	28	16S	2E	800
21E9	White Branch Slide	15	16S	7E	2800

Middle Fork Willamette River

22F3	Cascade Summit	7	23S	6E	4880
22F6	McCredie Springs	26	21S	4E	2120
22F8	Meridian Dam	13	19S	1W	750
22F7	Oakridge	16	21S	3E	1310
22F5	Railroad Overpass	21	22S	5E	2750
22F4	Salt Creek Falls	32	22S	5½E	4000
22F2	Waldo Lake	15	21S	6E	5500
22F14	Willamette Pass	33	24S	5½E	5600

Coast Fork Willamette River

22F9	Champion	12	23S	1E	4500
22F10	Golden Curry Creek	1	23S	1E	3136
22F13	Layng Creek R. S.	31	21S	1E	1200
22F12	Lund Park	22	22S	1E	1740
22F11	Weaver Creek	35	22S	1E	2440

Mary's River

23E1	Mary's Peak	21	12S	7W	3620

ROGUE, UMPQUA WATERSHEDS (9)

Rogue River

23G4	Althouse	17	41S	7W	4530
22G6	Annie Spring	19	31S	6E	6018
22G28	Beaver Dam Creek	1	38S	4E	5100
22G21	Big Red Mountain	31	40S	1W	6500
22G13	Billie Creek Divide	30	36S	5E	5300
22G27	Deadwood Junction	8	38S	4E	4600
22F19	Diamond-Crater Summit	34	26S	6E	5800
22G14	Fish Lake	3	37S	4E	4865
22G12	Fourmile Lake	9	36S	5E	6000
23G3	Grayback Peak	9	40S	5W	6000
22G26	Howard Prairie	32	36S	4E	4500
22G16	Hyatt Prairie Reservoir	15	39S	3E	4900
22G22	Little Red Mountain	25	40S	2W	6500
23G5	Pago Mountain	8	41S	7W	4045
22G5	Park Headquarters	8	31S	6E	6450
22G10	Seven Lakes No. 1	3	34S	5E	6800
22G11	Seven Lakes No. 2	26	33S	5E	6200
22G2	Silver Burn	33	35S	4E	3720
22G20	Siskiyou Summit	17	40S	2E	4630
22G9	South Fork Canal	12	33S	3E	3500
22G1	Whalebeck	3	31S	2E	5140

Umpqua River

22F9	Champion	12	23S	1E	4500
22F18	Diamond Lake	29	27S	6E	5315
23G7	Eden Valley Summit	10	32S	10W	2390
22F16	North Umpqua	19	26S	6E	4215
22F23	Red Butte No. 1	36	27S	2W	4560
22F24	Red Butte No. 2	30	27S	1W	4000
22F25	Red Butte No. 3	30	27S	1W	3500
22F26	Red Butte No. 4	36	27S	1W	3000
22F27	Red Butte No. 5	20	27S	1W	2500
22F28	Red Butte No. 6	17	27S	1W	2000
22F17	Trap Creek	1	27S	4E	3800
22G1	Whalebeck	3	31S	2E	5140
22F15	Windigo Pass	20	25S	6E	5800

KLAMATH WATERSHEDS (10)

Klomoth River

22G6	Annie Spring	19	31S	6E	6018
22G13	Billie Creek Divide	30	36S	5E	5300
21G5	Ely Mountain	15 & 22	39S	11E	5090
21F11	Chemult	21	27S	8E	4760
22G24	Cold Springs Camp	9	34S	15E	6100
20G12a	Crazyman Flat	9	34S	15E	6100
20H2a	Crowder Flat (Cal)	30	47N	11E	5200
22F19	Diamond-Crater Summit	34	26S	6E	5800
21F18	Diamond Lake Jct. (97)	1	29S	7E	4600
21G6a	Dog Hollow	1	40S	14E	4900
20G14a	Finley Corrals	11	36S	16E	6000
22G12	Fourmile Lake	9	36S	5E	6000
21G4	Gerber	12	39S	13E	4850
22G16	Hyatt Prairie Reservoir	15	39S	3E	4900
22G26	Howard Prairie	32	38S	4E	4500
22G15	Lake of the Woods	11	37S	5E	4960
22G5	Park Headquarters	8	31S	6E	6450
22G25	Pelican Guard Station	9	36S	6E	4150
20G6MP	Quartz Mountain	2	32S	16E	5320
22G10	Seven Lakes No. 1	3	34S	5E	6800
22G11	Seven Lakes No. 2	26	33S	5E	6200
20H1a	State Line (Cal)	21	48N	11E	5750
20G9AP	Strawberry	4	40S	16E	5760
22G2	Sun Mountain	22	32S	7½E	5350
20G13a	Sycan Flat	25	31S	14E	5500
21G3	Taylor Butte	22	33S	11E	5100

NUMBER	NAME	LOCATION SEC.	TWP.	RGE.	ELEV.

Pacific Power and Light Company's Snow Stations

1	Beatty (PP&L)	22	36S	12E	4300
10	Bly 101 Ranch (PP&L)	22	35S	14E	4800
3	Chiloquin (PP&L)	34	34S	7E	4187
4	Crystal (PP&L)	26	34S	6E	4200
5	Fort Klamath (PP&L)	22	33S	7½E	4150
6	Kirk (PP&L)	1	33S	7E	4533
9	Quartz Mountain (PP&L)	33	37S	16E	5504
8	Harriman Lodge (PP&L)	3	36S	6E	4200
12	Yamsay (PP&L)	20	31S	11E	4600

LAKE COUNTY, GOOSE LAKE WATERSHEDS (11)

Goose Lake

20G15a	Bear Flat Meadow	27	36S	19E	5900
20G8MP	Camas Creek	5	39S	21E	5720
20G11a	Cox Flat	16	37S	18E	5750
20G16a	Crane Mountain	13	40S	21E	6020
20H2a	Crowder Flat (Cal)	30	47N	11E	5200
20H3a	Dimmel Swamp (Cal)	31	48N	16E	7200
20G17a	Patton Meadow	28	38S	18E	6800
20G6MP	Quartz Mountain	2	38S	16E	5320
20H1a	State Line (Cal)	21	48N	11E	5750
20G9AP	Strawberry	4	40S	16E	5760

Abert Lake

20G15a	Bear Flat Meadow	27	36S	19E	5900
20G18AP	Colvin Creek	12	34S	21E	6450
20G11a	Cox Flat	16	37S	18E	5750
20G16a	Finley Corrals	11	36S	16E	6000
20G4	Mill Creek	1	34S	17E	6200
20G6MP	Quartz Mountain	2	38S	16E	5320
20G10a	Sherman Valley	15	37S	21E	6600

Summer Lake

20G2AP	Summer Rim	15	33S	16E	7200

Silver Lake

21F12P	Silver Creek	25 & 26	29S	13E	4900
20G13a	Sycan Flat	25	31S	14E	5500

Warner Lake

20G8MP	Camas Creek	5	39S	21E	5720
20G16a	Crane Mountain	13	40S	21E	6020
20H3a	Dimmel Swamp (Cal)	31	48N	22E	7000
19G1a	Hart Mountain	1	36S	25E	6350
20G10a	Sherman Valley	15	37S	21E	6600

Guano Lake

19H1	Bald Mountain (Nev)	17	45N	21E	6720
19G1a	Hart Mountain	1	36S	25E	6350
19H1a	Little Bally Mt. (Nev)	8	45N	19E	6600

HARNEY BASIN WATERSHED (12)

Silvies River - Silver Creek

18F7a	Call Meadows	29	20S	33E	5340
19F2	Delintment Lake	28	19S	26E	5600
19F3	Emigrant Butte	14	21S	27E	5000
18F3P	Idlewild Camp	27	20S	31E	5200
19F5P	Izee Summit	28	16S	29E	5293
18F1	Rock Spring	23	18S	32E	5100
19F1M	Snow Mountain	1	19S	26E	6300
19F7M	Starr Ridge	20	15S	31E	5150
18F4MP	Stinking Water	33	21S	34E	4800
19F4m	Willow-Bald	19	22S	29E	5000

Donner Und Blitzen River

18F6a	Buck Pasture	21	29S	35E	5700
18G2MA	Fish Crook	4	33S	33E	7900
19G1a	Hart Mountain	1	36S	25E	6350
18G1MA	Silvies	35	32S	32½E	6900
18G7a	WYW Lake	31	35½S	32½E	6600

Trout and Whitehorse Creeks

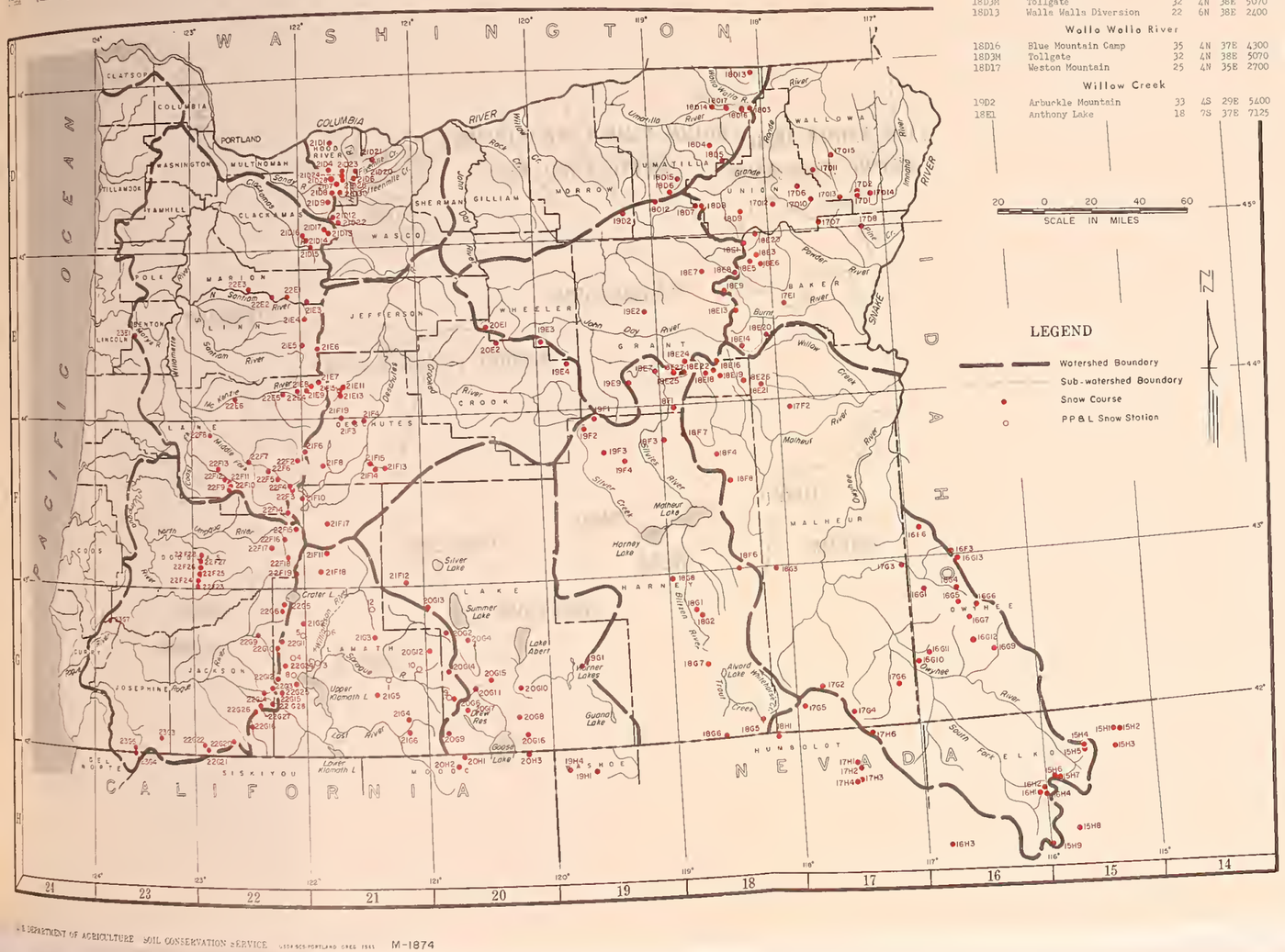
18G6a	Denio Creek	14	41S	34E	6000
18H1	Disaster Peak (Nev)	8	47N	34E	6500
17G5a	Oregon Canyon	9	40S	40E	6950
18G5a	Trout Creek	10	41S	38E	7800

Horney Lake

18G8	Buckskin Lake	2	30S	30E	5200

LEGEND

- 19G2 SNOW COURSE ONLY
- 19G2M SNOW COURSE AND SOIL MOISTURE
- 19G2MA SNOW COURSE, SOIL MOISTURE AND AERIAL MARKER
- 19G2A SNOW COURSE AND AERIAL MARKER
- 19G2n SOIL MOISTURE ONLY
- 19G2a AERIAL MARKER ONLY
- 19G2P SNOW COURSE AND PRECIPITATION GAGE
- 19G2p PRECIPITATION GAGE ONLY
- * RADIO TELEMETRY



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE USDA-SCS-PORTLAND, OREG. 1961 M-1874

Map and Index to OREGON SNOW COURSES

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The Following Organizations Cooperate in the Oregon Snow Survey Work

STATE
- Idaho Cooperative Snow Surveys
- Nevada Cooperative Snow Surveys
- Oregon State University
- Oregon State Engineer and Corps of State Watermasters
- Oregon State Highway Engineers
- Soil and Water Conservation Districts of Oregon

COUNTY
- Douglas County Water Resources Survey

FEDERAL
- Department of Agriculture
  - Cooperative Extension Service
  - Forest Service
  - Soil Conservation Service
- Department of Commerce
  - Weather Bureau
- Department of the Interior
  - Bonneville Power Administration
  - Bureau of Land Management
  - Bureau of Reclamation
  - Fish and Wildlife Service
  - Geological Survey
  - National Park Service
- Department of National Defense
  - Corps of Army Engineers

PUBLIC UTILITIES
- Pacific Power and Light Company
- Portland General Electric Company
- California-Pacific Utilities Company

MUNICIPALITIES
- City of Baker
- City of La Grande
- City of The Dalles
- City of Walla Walla

IRRIGATION DISTRICTS
- Arnold Irrigation District
- Associated Ditch Companies
- Burnt River Irrigation District
- Central Oregon Irrigation District
- East Fork Irrigation District
- Grants Pass Irrigation District
- Hood River Irrigation District
- Jordan Valley Irrigation District
- Juniper Flat Irrigation District
- Lakeview Water Users, Incorporated
- Medford Irrigation District
- Middle Fork Irrigation District
- North Board of Control - Owyhee Project
- North Unit Irrigation District
- Ochoco Irrigation District
- Rogue River Valley Irrigation District
- South Board of Control - Owyhee Project
- Squaw Creek Irrigation District
- Talent Irrigation District
- Tumalo Project
- Vale-Oregon Irrigation District
- Warmsprings Irrigation District

PRIVATE ORGANIZATIONS
- Amalgamated Sugar Company
- The Crag Rats, Hood River, Oregon

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
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Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation , navigation , mining and industry

"The Conservation of Water begins with the Snow Survey"